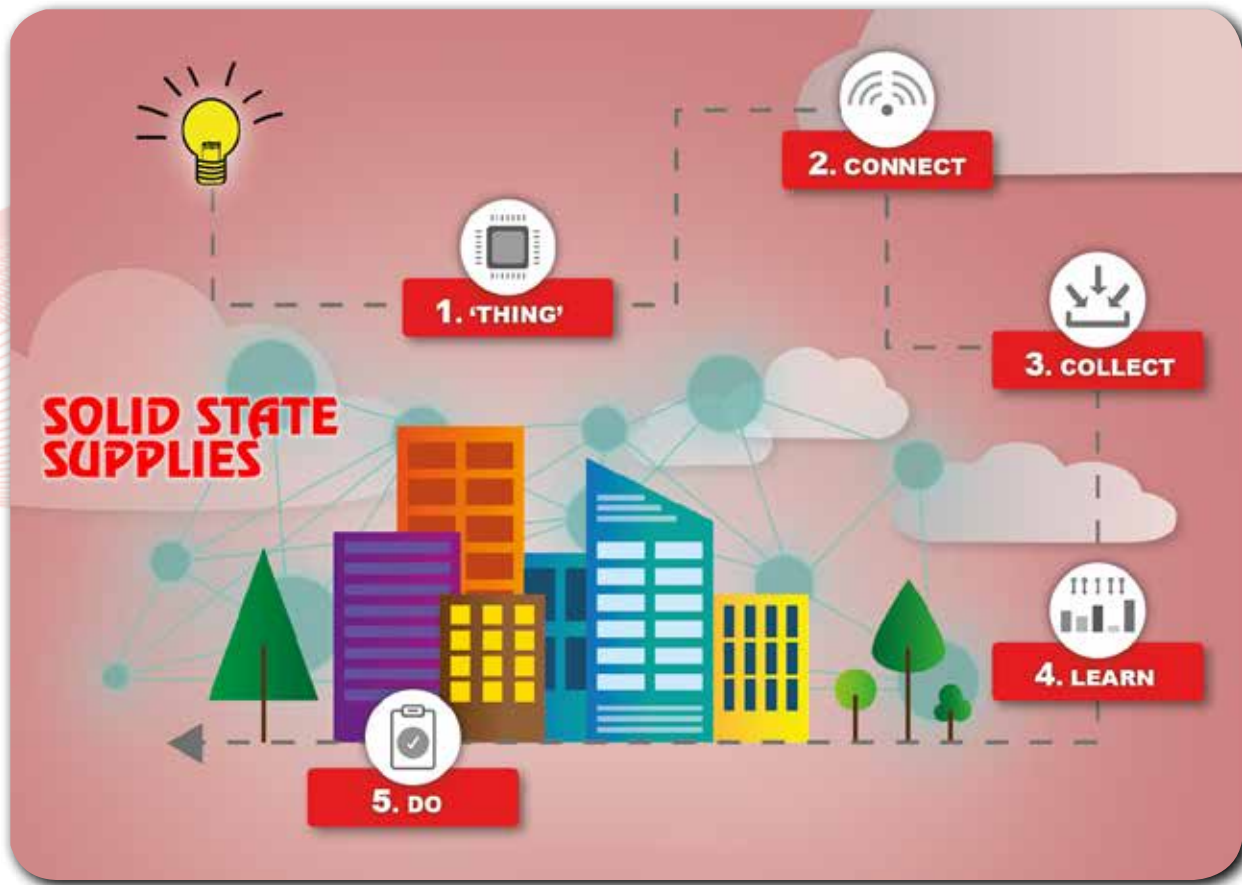


Plug-and-Play Solutions CATALOGUE

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**SOLID STATE
SUPPLIES**



The IoT Distributor of Choice

Solid State Supplies has been helping customers connect machine-to-machine (M2M) for over two decades. Our extensive expertise in hardware design along with collaboration of the world's leading hardware and software creators, means we are wholly positioned to help you with your IoT strategy.

Turning a 'product' into a 'connected product' can provide many benefits; from reducing costs, increasing efficiency, generating new revenue opportunities, to improving the end user experience.

From Smart Home Systems, Smart Retail Environments, Smart Traffic Monitoring Systems, to Industrial Control and Monitoring (Industrial Internet of Things (IIoT)) applications; essentially, if a device has an 'on/off' switch, it can be connected.

Making the move from 'product' to 'connected product' can be a simple process however due to the saturation in the market from the growing demand for IoT, making the suitable decisions around expertise and technology may seem daunting, and may overlook the original purpose to connect your product.

Here at Solid State Supplies, we work on the principal that any IoT project breaks down into the five key stages: Thing, Collect, Connect, Learn and Do.

By using this '5 stage IoT framework', we can help you at any stage of your IoT journey from developing the 'thing', connecting your product to the internet, moving the data to the cloud, to gaining a deeper insight into the data collected to make more informed decisions.

So whatever stage you are at with your IoT strategy, from initial concept to nearing the end, we can help you - get in touch and speak to one of experts.

Products

Computing	3
Connectivity	17
Lighting	31
Networking.....	35
Power	47
Sensors	55
Services	63
Storage	65
Accessories	71



Computing

Manufacturer	Part/SKU	Form Factor	OS Support	CPU	Memory
Aaeon	PICO-KBU4-A10-0001	SBC	Linux, Windows	i3 i5 i7 - Celeron	Up to 16GB
Aaeon	PICO-APL4-SEMI-A10-S001	Embedded PC	Linux, Windows	Intel Celeron & Pentium	Up to 4GB
Aaeon	RTC700B	Tablet	Android, Windows 10	Intel Atom	Up to 4GB
Aaeon	RTC1010	Tablet	Android, Windows 10	Intel Celeron & Pentium	Up to 4GB
Aaeon	RTC1200	Tablet	Linux, Windows 7, Windows 10	Intel iCore & Celeron	Up to 8GB
Aaeon	BOXER-6639M	Box PC	Linux, Windows	Intel iCore & Celeron	Up to 32GB
Aaeon	BOXER-6404M	Box PC	Linux, Windows,	Intel Celeron	Up to 8GB
Aaeon	BOXER-8170AI	Box PC	Android, Windows, Linux	NVIDIA Jetson TX2	Up to 8GB
Aaeon	VPC-3350AI	Embedded PC	Linux, Windows	Intel Pentium, Celeron & Atom	Up to 8GB
Aaeon	ICS-6270	Din Rail / Desktop	Linux, Windows	Intel Celeron	Up to 8GB
Aaeon	VPC-3350S	Embedded PC	Linux, Windows	Intel Pentium, Celeron & Atom	Up to 8GB

Display	Ethernet	USB	Peripherals	Page Ref
LVDS / HDMI 4K	2 x 8111G RJ-45	2 x USB 3.2 Gen1 2 USB x 2.0	Serial Port - COM1: RS-232 x 1, COM2: RS-232/422/485 x 1 (Ring/ +5V/ +12V) Audio - Line-out x1 DIO 4bit (2in 2 out) Expansion Slot M.2 E Key	7
HDMI 1.4	2 x 8111G RJ-45	2 x USB 3.2 Gen1 2 USB x 2.0	Storage - M.2 2280 (B Key) x 1 eMMC 32GB, up to 128GB (optional) Expansion slot - RS-232 x 1, RS-232/422/485 x 1 (Optional)	7
7" TFT LCD sunlight readable 1200 x 800	Expansion Option	USB 2.0 x 2 (A Type x 1, Mini USB x 1), USB 3.2 Gen 1 x 1 (Type C)	2 MP front camera & 8 MP auto-focus rear camera with flash DC-in jack x 1, MicroSD Card x 1, SIM card slot x 1, Built-in Speaker & Microphone x 1, 3.5mm stereo headphone jack x 1, 1D/2D Barcode scanner x 1 (Optional), Magnetic Stripe Reader x 1 (Option)	11
10.1" TFT LCD 1200 x 800		2 x USB 3.2 Gen1 (USB Type-C x 1), 2 x USB 2.0 x 2, DC-in jack x 1	Micro-HDMI port x 1, SIM card slot x 1, Micro-SD card slot x 1, Audio jack x 1 10/100/1000 Base-T RJ45 x 1, Smart card reader x 1 (Optional, Without IP protection)	11
11.6" FHD TFT LCD 1920 x 1080		USB 3.2 Gen 1 x 1 (Type A), USB 3.2 Gen 1 x 1 (Type C) (Optional), USB 2.0 x 2 (Type A)	HDMI port x 1, SIM card slot x 1, Micro-SD card slot x 1, Audio jack x 1 (3.5mm), DC-in Jack x 1, RS-232/422/485 COM Port x 1, 10/100/1000 Base-T RJ45 x 1	11
HDMI, VGA	RJ-45 x 4 for PoE (802.3at, max. 80W in total)	USB Type A x 6 for USB 3.2 Gen 1, USB Type A x 2 for USB 2.0	RS-232/422/485 x 6, DB-44 for 34-bit Digital I/O (5V), CFast™ slot x 1, SIM card slot x 1, 2 pin Remote power on/off, Reset switch Mic-in x 1, Line-out x 1, Antenna opening x 2, SYS LED indicator x 1, DC-in 3-pin terminal block (12~36V)	9
HDMI x2	4 x Intel I211, 10/100/1000Base-TX	USB 2.0 x 2 USB 3.2 Gen 1 x 1	RS-232 x 1, LAN x 4 CFast slot x 1, Antenna hole x 1 Power button, Power input	9
HDMI 2.0	1 x Gigabit Ethernet & 4 x 802.3af PoE for surveillance	USB Type A x 4 for USB 3.2 Gen 1 DB-9 RS-232/422/485 x 2 USB OTG x 1	RJ-45 x 1 for GbE LAN, IEEE 802.3af PoE x 4 (60W total power budget) HDMI Type A x 2 for HDMI 2.0, Power On/Off Button x 1 DC-In 2-pin terminal block x 1, USB OTG x 1, 12~24V DC-in Power Input x 1, SMA Antenna Holes x 2	8
HDMI	GbE port (RJ-45) x 1 PoE LAN x 4 (IEEE 802.3 at/af)	USB 3.2 Gen 1 x 2	Power Button x 1, Reset Button x 1, Power/HDD, LED x 2 DC-In power x 1, 8-bit DIO x 1, 4-ch digital input, 4-ch digital output RS-232/422/485 x 2, DP x 1, Audio Line-out x 1, Mic-In x 1 Micro SIM slot x 2	8
	RJ-45 GbE x 6	USB 3.2 Gen 1 x 2	RS-232/422/485 COM Port x 2, VGA port x 1 Software programmable button x 1 Power LED x 1, HDD LED x 1, Status LED x 1, Bypass LED x 2 DIN Rail/ Wallmount Lock	10
HDMI	GbE port (RJ-45) x 1 PoE LAN x 4 (IEEE 802.3 at/af)	USB 3.2 Gen 1 x 2	CanBus connector x 1 (In-vehicle config. by project base) RS-232 x 3 (In-vehicle config. by project base) DC-In power x 1, 8-bit DIO x 1, 4-ch digital input, 4-ch digital output RS-232/422/485 x 2, DP x 1, Audio Line-out x 1, Mic-In x 1 Micro SIM slot x 2	10

Manufacturer	Part / SKU	Form Factor	OS Support	CPU	Memory
Digi	XK3-Z8S-WZM	Dev Board		Silicon Labs EFR32MG SoC	
Digi	CC-WMX6UL-KIT	SBC	Linux	NXP i.MX6UL-2, ARM Cortex-A7	Up to 1GB
Digi	CC-WMX6P-KIT	Module	Linux	i.MX6Plus Cortex-A9	8 GB flash, 2 GB DDR3
Digi	CC-WMX8-KIT	SBC	Android, Linux, Yocto Project	i.MX 8X quad-core SOM	16 GB eMMC, up to 2 GB LPDDR4 (32-bit)
Kingtech	PV135	SBC	Linux	Allwinner V40	Up to 32GB
TechNexion	TEK3-BSW	Embedded PC	Linux, Windows 7, Windows 10	Atom x5-E8000 Pentium N3710	Up to 8GB
TechNexion	TCK3-APL	Box PC	Linux, Windows 10	Atom x5-E3930 Atom x7-E3950	Up to 8GB
TechNexion	TEK3-IMX6	Box PC	Android, Linux, Windows 10	i.MX6	Up to 4GB
TechNexion	TC-0700	Panel PC	Android, Linux	i.MX6	Up to 2GB
TechNexion	TC-1010	Panel PC	Android, Linux	i.MX6	Up to 2GB
TechNexion	TC-1560-APL	Panel PC	Linux, Windows 10	Atom x5-E3930 Atom x7-E3950	Up to 8GB

Display	Ethernet	USB	Peripherals	Page Ref
			3 Digi XBee Grove Development Board 3 Digi XBee ZigBee SMT Modules 3 Micro-USB Cables 3 Antennas 3 Comprehensive Web and Video-Based Instruction	12
LVDS	2 x RJ-45 (10/100 Mbit)	2 x USB Host (Dual Type-A), 1 x USB Host (6-pin header), 1 x USB OTG (Micro-USB)	Cellular modem or third party PCI Express Mini Card modem allows you to integrate cellular connectivity without the usual cost and complexity	12
LVDS, MIPI display port, MIPI camera port & HDMI v1.4	1 Gigabit Ethernet	USB 2.0 Host and PHY, USB 2.0 HSIC Host x2 USB2 OTG and PHY, PWM	MMC 4.4/SD 3.0 x3MMC 4.4/SDXC, UART x5 (5 Mbps), MIPI HSI, S/PDIF Tx/Rx, I2C x3, SPI x5, ESAI, I2S/SSI x3, FlexCAN x2, MLB150 + DTCP, S-ATA and PHY (3 Gbps), 3.3V GPIO, Keypad, PCIe 2.0 (x1 lane), HDMI and PHY, MIPI DSI, MIPI CSI2, 20-bit CSI, 24-bit RGB, LVDS (x2), RTC, External address/data bus, Watchdog, Timers, JTAG	12
2x LVDS/MIPI with backlight control & I2C touch interface	2x Gigabit Ethernet 10/100/1000M with AVB on RJ-45, with 2 LEDs for link/speed/activity	2x USB 2.0 Host 1x USB 3.0 on Type-C connector	Power management with both hardware and software support for low-power designs Multi-display and camera capabilities with hardware acceleration Pre-certified dual-band 802.11a/b/g/n/ac 2x2 and Bluetooth 5 connectivitySeamless cellular modem and Digi XBee3® integration Cloud and edge compute services integration	13
LVDS, MIPI, Dual Display	RJ45	6 USB HOST, 2 onboard and 4 external equipment	4 cores, reaching up to 1.5 GHz main frequency Supports CVBS input and output Supports VGA output and YPBPR output 4 serial ports, TF cards and other many expansion interfaces	13
HDMI miniDP	2x RJ45	1x USB 3.0 Host 1x USB 3.0 OTG (Type-C)	1x 3.5mm jack Microphone, 1x 3.5mm jack Stereo Audio in 1x 3.5mm jack Stereo Audio out, 1x Micro-SIM cardslot 1x microSD cardslot	14
2x miniDP	2x RJ45	1x USB 3.0 OTG (Type-C) 2x USB 3.0 Host	1x Micro-SIM cardslot, 1x microSD cardslot 2x RS-232, 2x Intel i210 Gigabit LAN, 2x M.2 slot	14
1x HDMI 1x VGA 15-pin D-SUB	1x RJ45	1x USB 2.0 OTG (Type-C) 2x USB 2.0 Host	1x 3.5mm jack Microphone, 1x 3.5mm jack Stereo Audio in 1x 3.5mm jack Stereo Audio out, 1x Micro-SIM cardslot 1x microSD cardslot	14
1x HDMI	1x RJ45	1x USB 2.0 Host 1x USB 2.0 OTG	1x microSD cardslot 7 inch widescreen LCD with LED backlight	15
1x HDMI	1x RJ45	1x USB 2.0 OTG 2x USB 2.0 Host	1x Micro-SIM cardslot, 1x microSD cardslot 10.1 inch widescreen LCD with LED backlight Projective Capacitive (multitouch)	15
2x miniDP	2x RJ45	1x USB 3.0 OTG (Type-C) 2x USB 3.0 Host	1x Micro-SIM cardslot, 1x microSD cardslot 15.6 inch widescreen LCD with LED backlight Projective Capacitive (multi-touch)	16

PICO-KBU4 Single Board Computer



A rugged and compact SBC solution fitted with 7th Generation Intel Core I processor (formerly Kaby Lake). The device features up to 16GB DDR4 SODIMM memory and the power to drive applications previously on possible with larger motherboards. GbE LAN ports enable the use of two HD cameras, and with its GPIO, two COM ports, two USB3.0 ports, and two USB2.0 pin headers, it can connect to and control a range of sensors.

Ideal applications include; machine vision, cloud gateway systems, surveillance, in car camera systems, drone technology, robotic technology.

Features & Benefits

- 0°C~60°C operating temperature range
- HDMI and LVDS ports, SATA slot
- M.2 B and E keys for extra storage
- WiFi & Bluetooth Connectivity
- Compact & lightweight
- Dual Gigabit Ethernet Support

Part/SKU

PICO-KBU4-A10-0001

Pico-ITX TurnKit with Intel Processor

Industrial grade embedded single board computer with Intel Atom/ Pentium N4200/ Celeron N3350 Processor SoC.

The device is lightweight so easy to adopt into various applications, with 2GB (DDR3L) onboard memory.

Optional accessories available include; US power cord, European power cord, Japanese power cord, din rail mounting kit, wall mounting kit and power adapters.

Features & Benefits

- Onboard Storage eMMC 32GB
- GbE x 2, HDMI x 1.4
- M.2 2280 B key for storage
- M.2 2230 E key for wireless Module
- COM x 2 (Optional)
- USB 3.2 Gen 1 x 2 (Rear IO), USB2.0 x 1 (Optional)
- Lockable DC 12V

Part/SKU

PICO-APL4-SEMI-A10-S001



Fanless Network Video Recorder with Intel® Atom™ Processor & Intel® Movidius™ Myriad™ VPU

Perfect for AI and edge computing applications, including license plate and facial recognition. As an in-vehicle AI embedded system, it helps to power driver safety applications such as advanced driver-assist systems (ADAS) or driver monitoring and behaviour analysis for heavy vehicle operators.



Features & Benefits

- Intel® Atom® x5-E3940 Processor
- 2x Intel® Myriad™ X VPU inside
- Supports DDR3L SODIMM up to 8 GB
- Supports Two Display by HDMI x1, DP x 1
- Intel® Giga Ethernet x 5 Ports, including 4 x PoE Ports, 1 x LAN
- 4-CH DI & 4-CH DO (Isolation, optional)
- -20 °C to 60 °C fanless operation

Part/SKU
VPC-3350AI

AI Edge Fanless Embedded Box PC with NVIDIA Jetson TX2, 4 PoE LAN

A range of intelligent Box PC's powered with solutions from "NVIDIA Jetson" and "Intel AI Solutions" designed specifically power a wide range of AI Edge applications.

This powerful PC has the capability to support AI frameworks such as TensorFlow, Caffe, and can support AI inference software from developers and customers.

Features & Benefits

- Designed specifically for Embedded AI vehicle Controller technology.
- OS Support - AAEON ACLinux 4.9, Compliance with Ubuntu 18.04
- Comes with 8GB LPDDR4 memory and 32GB eMMC storage onboard
- Has 4 PoE LAN ports, each with their own dedicated chip for greater bandwidth and stability for camera connections.
- 4 USB 3.2 Gen 1 ports, two COM ports, two HDMI ports, and remote ON/OFF.
- Gigabit LAN port and two antenna ports to allow easy integration into existing networks, or for deployment as an AIOT gateway.
- Operating temperatures of -20°C to 50°C and features a wide input voltage range of 12 to 24 VDC

Part/SKU
BOXER-8170AI



Vision System Fanless Embedded Box PC

The BOXER-6639M unifies a comprehensive portfolio of different applications via a single machine vision platform. This durable and highly scalable ruggedized computer excels in extreme environments such as factories.

Designed to streamline industrial automation processes such as factory control and product lifecycle management, this PC is a reliable, flexible and low-maintenance choice for machine vision architecture, and is designed for swift deployment.

CPU, DRAM and minicards are all easily accessible and installable, and this PC provides a wide range of expansion options, most notably 4 PoE slots, which provide simultaneous internet and power connection of up to 80 watts, and up to 7 LAN ports.

Features & Benefits

- Extreme Computing Power & Graphic Display Capability
- Desktop Grade Socket Type Processor with Longevity Support DDR4 ECC or Non-ECC SODIMM, Up to 32GB
- VGA + HDMI x 2 Triple Display, HDMI 4K Display
- USB 3.2 Gen 1 x 6
- Industrial-grade Intel[®] GbE LAN x 3
- Easy Access Design
- Wide Range DC 12~36V Input
- 34-bit Digital Input and Output
- Operates within a temperature spectrum of -20~55°C

Part/SKU

BOXER-6639M



1U Rackmount Intel[®] 8th Generation Platform Network Appliance

Aeeon's rackmount network appliances provide flexible network solutions with the power of the 8th Generation Intel Core and Xeon processors, these network appliances are built for UTM, SD-WAN, web monitoring, load balancing, and even Network Virtualization.

These systems offer unmatched flexibility in their class, and are designed to be easy to use and easily configured for small to mid-range network needs. With a shorter chassis, it can be deployed almost anywhere without need of a dedicated rack, perfect for small businesses or remote offices. It features eight built in LAN ports and a NIM slot, supporting up to 16 LAN ports in total.

Features & Benefits

- Configurable built-in LAN: 8x Gigabit Ethernet or 6x Gigabit Ethernet with 2x SFP
- Built for UTM, SD-WAN, Web Monitoring and Load Balancing
- A range of processors to choose from, from the dual core i3 up to six-core Xeon E-2 processors
- 2 x DDR4 SO DIMM/ECC Up to 32GB
- TPM Supported (Optional Request)
- RJ-45 Console x 1, USB 3.0 x 2, HDMI x1

Part/SKU

BOXER-6404M



DIN Rail, Industrial-Grade Network Appliance

A highly scalable and rugged hardware solution for critical infrastructure in harsh industrial-based environments, and as such has been designed to industrial-grade requirements, operating at an impressive wide-temperature range of -40°C ~ 75°C. It is enclosed within a corrosion-proof steel casing for resistance against outer stimuli, and features an aluminium heatsink, enhancing the cooling function and maximizing air circulation.

Storage choices include a 2.5" HDD bay and a CFast™ socket, as well as a co-lay for BOM optional mSATA, whilst system memory comprises a 204-pin DDR3L 1867MHz SODIMM slot, with a capability of 8GB.

Features & Benefits

- Built around the Intel® Atom Apollo Lake processor SoC
- Optional support for TPM v1.2 9660 and TPM2.0 9665
- 2-pair LAN bypass function
- 6 native LED LAN ports, USB 3.0 ports, a VGA port and an isolated COM port (RS-232/422/485) with ESD protection
- Supports up to Mini-Card Socket with SIM Socket x 1
- Offers a pre-emptive shield against cybersecurity threats such as malware infection, PLC logic degradation, problematic modems and remote bases, hijacked interfaces, and compromised control systems

Part/SKU

ICS-6270



Fanless In-Vehicle/Industrial Network Video Recorder

This Mobile NVR from AAEON provides users with choice, flexibility and customization not offered in other Mobile NVRs. The VPC-3350S offers the Intel® Atom® x5 E3940 processor (formerly Apollo Lake) as standard, with options for Pentium® N4200, Celeron® N3350 and Atom® x7 E3950.

Available in two configurations: the compact Industrial VPC-3350S and the flexible In-Vehicle VPC-3350S.

The Industrial configuration offers an I/O compliment perfect for use in machine vision applications, such as license plate recognition.

The In-Vehicle configuration features an innovative modular design allowing ultimate flexibility for less cost, and greater customization with the ability to deploy the system quickly.

Features & Benefits

- 4x PoE Ports, allowing the system to connect to a wide range of devices.
- Can also be configured with an integrated AI module featuring Intel® Movidius™ Myriad™ X
- Fanless System
- 204-pin Single Channel DDR3L 1866 MHz SODIMM up to 8 GB
- Integrated Graphics Engine Supports Two Display by HDMI x 1, DP x 1
- Full Mini-PCIe Socket x 2 (USB + PCIe); (Support up to Mini-PCIe Socket x 4, Optional)
- Built-in CANBus, GPS & G-Sensor (In-vehicle config. by project base)
- E-Mark Certified (In-vehicle config. by project base)

Part/SKU

VPC-3350S



11.6" Rugged Tablet

Rugged tablet PC from AAEON offering rich I/O features and options to quickly integrate with any task or application. The waterproof tablet is IP65 rated to keep out dust and other contaminants, as well as MIL-STD-810 drop and vibration tested, and can operate in temperatures from -20°C to 60°C (-4°F~140°F).



Part/SKU
RTC-1200

Features & Benefits

- 11.6" FHD (1920 x 1080) 300-nit / 1000-nit TFT LCD
- Intel® Core™ i 7100U / 7300U / Celeron® 3965U Up to 3.9 GHz
- One DDR3L SODIMM Socket, Up to 8GB, DDR4 SODIMM Socket (Optional)
- One M.2 Slot for SSD, 64GB (Default)
- Projective Capacitive Multi-Touch Screen
- WiFi 802.11b/g/n, Bluetooth 4.1, LTE (Optional)
- 2MP Front and 5MP Rear Camera
- RS-232/422/485 COM Port + 10/100/1000 Base-T RJ45
- USB 3.2 Gen 1 x 1, USB 2.0 x 2, USB 3.2 Gen 1 x 1 (Type C) (Optional)
- 2D Barcode Scanner (Optional)
- HF RFID Reader (Optional)
- Hot-swappable Battery, 14.4V/ 2270mAh, 32.7W x 2
- Programmable Function Key: Windows, Volume Up/Down, F1, F2, F3, with LED Illumination
- Docking Connector with GNSS / WWAN Antenna Pass-through Connector
- Windows® 10 IOT (Windows® 7 for Skylake, Optional)

10.1" Rugged Tablet with Intel® N3350/N4200 Processor with Windows®

This rugged tablet features an LCD bonded with scratch-resistant projected capacitive multi-touch screen and is designed to operate in a range of tough conditions, with an operating temperature range of -20°C to 50°C it also meets MIL-STD-810G specifications for vibration resistance and drop testing from 122cm. It's also waterproof and IP65 compliant construction which also keeps out dust and other contaminants.

Features & Benefits

- 10.1" WXGA (1280 x 800) 800-nit / 300-nit TFT LCD
- Intel® Celeron™ N3350 1.1 GHz Dual Core Up to 2.4 GHz (N4200 Optional)
- Onboard DDR3L Memory, 4GB (Default)
- eMMC 64GB (mSATA III Up to 512GB Optional)
- Projected Capacitive Multi-Touch Screen
- WiFi 802.11b/g/n, Bluetooth 4.2, LTE (Optional)
- 2MP Front and 8MP Rear Camera
- RS-232/422/485 COM Port + 10/100/1000 Base-T RJ45
- USB 3.2 Gen 1 x 2 (USB Type-C x 1), USB 2.0 x 2
- 2D Barcode Scanner & Smart Card Reader (Optional)
- HF RFID Reader (Optional)
- Up to 3 GNSS, GPS+Galileo(Default), GLONASS or BeiDou(Optional)
- One Hot-swappable Battery + Internal Battery, Up to 44W Battery Capacity
- Programmable Function Key: F0, F1, F2, F3, Volume Up/Down, With LED Illumination
- Windows® 10 IOT



Part/SKU
RTC-1010

7" Rugged Tablet

Aeeon's 7" Rugged Tablet based Windows 10 with up to 1.92 GHz Quad Core Processor.



Part/SKU
RTC-700B

Features & Benefits

- 7" WXGA (1280 x 800) TFT LCD Display, 400 nits, Sunlight Readable (Optional)
- Intel® Atom™ x5-Z8350 CHT-T3 Quad Core 1.92 GHz Processor
- DDR3L - RS 1600 2GB/4GB (Optional)
- Projected Capacitive Multi-Touch Panel, Gorilla Glass
- Extended Battery Swappable, MIL-STD 810G, IP65 Compliant
- GPS/GLONASS Simultaneously
- WiFi b/g/n, BT4.0
- Supports NFC/RFID (Optional), Ethernet + COM Port (Optional)
- 1D/2D Barcode Scanner with Trigger Button
- MSR (Optional)/ SCR (Optional)
- G-Sensor, Light Sensor, E-Compass
- Windows® 10

XBee 3 Zigbee Mesh Kit, Worldwide

The Zigbee XBee kit offers a simple solution and introduction to building a mesh network and integrates easily with Digi's SBC's.

Zigbee is one of the most popular open standard mesh networking protocols, designed for routing data from one node to another, allowing low data rates on low-power applications. Complete with step-by-step guidance, you can quickly assemble kit components to create reliable, low-power device communications and sensor networks.

XBee modules are also now available in; through hole, surface mount and now micro-mount form factors.

Everything you need to explore mesh networking in one kit. Contents include:

- 3x - Digi XBee Grove Development Board
- 3x - Digi XBee ZigBee SMT Modules
- 3x - Micro-USB Cables
- 3x - Antennas
- 3x - Comprehensive Web and Video-Based Instruction
- XCTU Software from Digi - free to download to assist in building your mesh network.



Part/SKU
XK3-Z8S-WZM

Digi ConnectCore 6UL SBC Pro Development Kit

The ConnectCore 6UL Development Kit delivers a complete off-the shelf Single Board Computer built on the ConnectCore 6UL SoM, which features the NXP i.MX6UL processor.

The CC6UL SBC can be used for fast prototyping on the SoM or as a ready built platform on a compact form factor of 100mx72mm, eliminating the need for hardware design.

The kit includes; a 1 ConnectCore 6UL SBC Pro with dual Ethernet | A console port cable | Dual-band antenna | Power supply and accessories.

Features & Benefits

- Pre-certified dual-band 802.11ac Wi-Fi connectivity
- Bluetooth 5, with Bluetooth Low Energy support
- Dual-10/100 Mbit Ethernet networking
- Ready for cellular connectivity with inbuilt Mini-PCIe connector
- Digi provide full and customizable set of peripherals and interfaces
- Industrial operating temperature range
- Complete Yocto Project Linux BSP with source code



Part/SKU
CC-WMX6UL-KIT

ConnectCore 6+ Professional Development Kit

This ultra compact, industrial grade single board computer offers a fast route to market by eliminating board design. Built on the Digi ConnectCore 6+ Cortex-A9 processor family, it provides a common platform with scalable Freescale i.MX6 performance.

Its low-profile, surface-mount design maximizes integration flexibility and significantly reduces design risk in a highly cost effective, reliable form factor with optimized heat dissipation capabilities even in the most demanding quad-core system configurations.

Features & Benefits

- Independent Cortex-M0+/Cortex-M4 Microcontroller Assist subsystem
- Cost-effective, reliable, low-profile surface-mount module form factor
- Pre-certified 802.11a/b/g/n/ac and Bluetooth 5
- Smart Power Management Architecture with PMIC
- Android and Yocto Project Linux software platform support
- Reliable design with IEC 60068 and HALT verification
- Dedicated on-module security + authentication controller
- Designed for long-term availability



Part/SKU
CC-WMX6P-KIT

Digi ConnectCore 8X SBC Pro Development Kit

The Digi ConnectCore 8X SBC Pro development kit enables users to build their product around an industrial grade, pre-certified, production ready single board computer platform.

Using an SBC reduces time to-market by virtually eliminating the traditional risk, effort and complexity of custom board designs without sacrificing flexibility or capabilities.

The compact form factor integrates an on-board dual band antenna option, USB connectivity and Digi XBee RF connector. Additional features include cellular connectivity options, multi-display/camera and audio support, external storage and expansion connectors.

The kit includes a Digi ConnectCore 8X SBC Pro, console port cable, two dual band antennas, power supply and accessories.

Features & Benefits

- Compact Pico-ITX form factor (100 mm x 72 mm)
- Power management with both hardware and software support for low-power designs
- Multi-display and camera capabilities with hardware acceleration
- Pre-certified dual-band 802.11a/b/g/n/ac 2x2 and Bluetooth 5 connectivity
- Seamless cellular modem and Digi XBee3® integration
- Cloud and edge compute services integration
- Built-in Digi TrustFence device security
- Yocto Project Linux and Android support

Part/SKU

CC-WMX8-KIT



KINGTECH

Multimedia LCD Driver Integrated Board & Display

This SBC is specifically designed for driving displays, a fast to market solution with no PCB design and accompanied with your choice of display. Based on the Allwinner V40 main chip with ARM Cortex-A7 architecture. The board can support LVD's or Mipi displays, CVBS input and output, VGA output, YPbPr our put and HDMI high definition output.

The application of Allwinner new generation SmartColor technology contributes to brilliant pictures display under the high resolution and provide a pleasant visual effect for your machine.

Features & Benefits

- Various eMMC Memory options: 1GB/2GB DDR+8GB/16GB/32GB
- 4 cores, reach up to 1.5 GHz main frequency
- Support LVDS displays and Mipi displays and dual display
- Support CVBS input and output
- Supports VGA output and YPBPR output
- 4 serial ports, 6 USB ports, TF cards and other many expansion interfaces
- Display options include various sizes up to 32"

Part/SKU

PV135



Fanless Embedded Computer



Part/SKU
TEK3-BSW

Technexion's fanless embedded system is designed with robust features allowing for operation and maintenance in diverse environment. Based on a quad core Intel Atom x5-E8000 or Intel Pentium N3710 processor, is compatible with Technexion expansion boards for additional I/O's.

The device can either be mounted onto a surface or into an existing rack system using the din rail mount.

Features & Benefits

- Micro-SIM card slot
- MicroSD card slot
- 8GB SO-DIMM DDR3L
- Video decode - 1080p240 H.264 | Video encode 1080p120 H.264
- Available with 12V 8-36V (wide power input)
- Optional PoE function 802.3at
- Optional Wi-Fi & Bluetooth 5, based on Qualcomm QCA9377
- Supports various operating systems; Ubuntu, Windows 7 & Windows 10

Apollo Lake Based Fanless Box PC

Customisable Fanless Box PC - with a variety of choices of; processor, memory, storage, Wi-Fi/ Bluetooth & power adapter. Versatile and robust enclosure for harsh environments, with industrial grade operating temperatures of -40° to +70° C.

This device also offers 4K Ultra HD on two independent displays and delivering high-level video performance and intense media processing capability.

Available operating systems are: Linux; Ubuntu & Windows 10

Features & Benefits

- Din rail mount
- Available with the Intel Atom x5-E3930, x5-E3940, or x5-E3950 processor.
- SD Card slot for additional memory
- 4K video decode & encode
- Power input 10-30V DC



Part/SKU
TCK3-APL

ARM Cortex A9 Fanless Box PC

This high-performance fanless box PC based on either single/dual/quad core ARM Cortex-A9 NXP i.MX6 series processor, comes with 4GB memory & storage and including a micro SD slot to add additional memory. This PC also features internal M.2 and Mini-PCIe slots (with SIM card) for connectivity expansion modules.

Operating Systems available: Standard Support; Linux; Yocto; Ubuntu; Android; Extended Support; & Commercial Linux

Features & Benefits

- PoE function 802.3at (optional)
- WiFi 802.11 a/b/g/n/ac (optional) & Bluetooth using Qualcomm Atheros QCA9377
- HDMI & VGA 15-pin D-SUB
- Operating Temperature: 0° to +50° C
- Surface & Din rain mountable
- Compatible with Technexion expansion boards for additional input and outputs



Part/SKU
TEK3-IMX6

Ultra Slim - ARM Cortex-A9 7 Inch Panel PC

Technexion's plastic panel PC is available with NXP i.MX6 solo, dual lite, dual and quad options.

The display offers a projective Multi-touch bright (500 nits) high resolution (1024 x 600) LCD display.

Other features of this device include: A galvanic isolated CAN bus and serial ports (RS-232/422/485). USB host, USB OTG, microSD card slot, 4 GPIO's and HDMI for secondary display. PoE function 802.3at or 10-30V DC power input. Gigabit LAN with WiFi and Bluetooth options and is available with various colourful bezels.

The panel PC is built on a slim form factor with industrial grade specifications, multiple expansion slots and rich I/O capability.

Features & Benefits

- Choice of 3 processor options to best suit your needs.
- 7 inch widescreen LCD display with LED backlight
- Choice of operating systems including: Linux, Yocto, Ubuntu & Android. Technexion also offer Commercial Linux with extended support.
- Operating temperatures of 0° to +50° C
- Choice of coloured bezels available include; Black, Blue, Green, Grey, Orange, Red, Yellow & Ivory White.

Part/SKU

TC-0700



Ultra Slim ARM Cortex-A9 10.1 Inch Panel PC

Efficient, low power, fanless HMI based on your choice of i.MX6 processor. Built in display is a 10.1 inch Projective Capacitive (multitouch) high-res (1280 x 800) bright (350 nits) widescreen LCD with LED backlight.

Other features include: Galvanic isolated CAN Bus and Serial (RS-232/422/485) ports. USB 2.0 Host, USB 2.0 OTG, microSD and Micro-SIM card slots, 16x GPIO (galvanic isolated) and HDMI for secondary display. PoE function 802.3at or 10-30V DC power input.

Features & Benefits

- ARM Cortex-A9 NXP i.MX6 processor options: Solo, Dual Lite, Dual and Quad
- Slim form factor with industrial grade specifications, multiple expansion slots and rich I/O capability
- Available with brushed aluminium bezel for finish
- Dimensions: 263(W) x 182(H) x 45(D) mm
- Choice of operating systems including: Linux, Yocto, Ubuntu & Android. Technexion also offer Commercial Linux with extended support.

Part/SKU

TC-1010



15.6" PCAP Touch LCD PC

The TC-1560-APL is a 15.6" low power, slim, fanless HMI based on Intel Atom x5-E3930, x5-E3940, or x5-E3950 processor.

Designed with robust features to enable operation and convenient maintenance in diverse industrial and consumer environments, the device has the capability to support up to 3 independent including 4K Ultra HD on two external displays, whilst providing high-level video performance and intense media processing capability.

Features & Benefits

- Choice of 3 processor options:
 - Atom x5-E3930 (2x 1.6GHz)
 - Atom x5-E3940 (4x 1.8GHz)
 - Atom x7-E3950 (4x 2.0GHz)
- 2x M.2 expansion slots
- Operates on Linux, Ubuntu or Windows 10
- Extended Temperature range: -20° to +50° C
- Dimensions: 407 (W) x 257 (H) x 59 (D) mm - with rear mount, VESA mount or surface mount options.

Part/SKU

TC-1560-APL



Connectivity

Manufacturer	Part/SKU	Wi-Fi	Bluetooth	Ethernet	ZigBee	LoRa	Cellular	Form Factor	UART	USB	Page Reference
D-Link	DSH-G300	•	•		•		Optional	Boxed		•	18
Digi	IX14-M301			•			•	Boxed			20
Digi	WR21-M72B-DE1-SB			•			•	Boxed	•		19
Digi	WR31-M82A-DE1-TB			•			•	Boxed	•		19
Digi	IX20-WAG4	•		•			•	Boxed	•		20
Digi	AW08-G300	•		•				Boxed	•	•	21
Digi	XU3-A11				•			Dongle		•	21
Digi	XBIB-CU-TH							Board	•	•	21
Insego	USB800						•			•	29
Quectel	EC21EFA-MINIPCIE						•	PCle			24
Quectel	EC25EFA-MINIPCIE						•	PCle			24
Quectel	EG21GGB-MINIPCIE						•	PCle			25
Quectel	EG25GGB-MINIPCIE						•	PCle			25
Quectel	BG95M3LA-MINIPCIE						•	PCle			25
Quectel	BG96MA-MINIPCIE						•	PCle			25
Rap Systems	HG1PLUS-HART-V2			•				Boxed			18
Robustel	R1510	•		•			•	Boxed			22
Robustel	R2000	•		•			•	Boxed			22
Robustel	R3000-LG			•		•	•	Boxed		•	22
Robustel	R2110	•	•	•			•	Boxed		•	23
Robustel	MF833V-WTW						•	USB		•	23
SparkLAN	WNFT-237ACN(BT)	•	•					M.2			27
SparkLAN	WPEA-251ACNI(BT)	•	•					PCle			27
SparkLAN	WNFQ-262ACNI(BT)	•	•					M.2			27
SparkLAN	WUBT-236ACN(BT)	•	•					Dongle		•	28
SparkLAN	WPEB-265AXI(BT)	•	•					PCle	•	•	28
SparkLAN	WNFB-265AXI(BT)	•	•					PCle	•		28
TechNexion	CLIX-9377	•	•					Board			26
TechNexion	STIX-9377-M2-AE	•	•					M.2	•		26
TechNexion	STIX-9377-M2-B	•	•					M.2	•		26
TechNexion	STIX-9377-MPCIE	•	•					PCle	•		26

ROUTERS & GATEWAYS

Working alongside our premier supply chain, Solid State Supplies Ltd are able to offer a selection of highly reliable, top of the range Gateways & Routers.

Whether it's a customisable option needed or plug and play technology for a range of, we can offer a fast-to-market solution for a variety of applications.



Multi-Protocol IoT Gateway – by D-Link

As a fully certified solution, the D-Link Multi-Protocol IoT Gateway offers a Bluetooth, Zigbee & Wi-Fi compatible device, brought to you using the SiLabs Mighty Gecko SoC. Cellular connectivity can also be added to the device using an auxiliary 4G USB dongle.

The DSH-G300 comes with a pre-built application or has the option and capability to design your own "Company Branded" custom solution. Customisation doesn't stop there either as you have the option to add your company logo (volume dependant) and market the device with your own company branding.

Suitable applications include: Smart Home applications, lighting controls, signal boosting and Smart Energy.

Features & Benefits

- Built for IoT Development
- Open IPv6 Based Protocol - device to device cloud connections.
- Built-in security
- Seamless Integration
- Low Energy Footprint
- Fast-to-market solution
- Supports multiple Smart Home protocols such as Zigbee Technology, Thread, and Bluetooth™
- Mesh network enabled device
- Small package - 89 mm (diameter) x 27 mm (height)

Part/SKU
DSH-G300



RAP Systems HG1+ Intelligent HART Gateway

This intelligent gateway used as a HART (Highway Addressable Remote Transducer) Modem with industry standard Asset Management Software such as PACTware, FieldCare, FieldMate and other device management software.

Or alternatively as a HART to Modbus converter allowing SCADA, DCS, PLC or PC based systems the ability to read and write data to field instruments via a traditional Modbus interface. Communications with the HG1 is supported over Ethernet and Serial interfaces (RS232, RS422 and RS485) and both Modem and Modbus features maybe used simultaneously.

Features & Benefits

- Low power device
- Compact in size
- DIN rail mounting option
- Supports for point-to-point or multi-dropped loops
- Has Windows tools for simple setup and management
- Supports IPv6 networking

Part/SKU
HG1PLUS-HART-V2



Digi Transport Router - WR21-M72B-DE1-SB

This full-featured cellular router offers the flexibility to scale from basic connectivity applications; to enterprise class routing and security solutions. The platform includes software selectable multi-carrier and regional LTE variants. The device also offers flexible connectivity options and extended temperature ranges enabling suitability for both Industrial and Commercial applications.

Digi management solutions provide easy setup, configuration and maintenance of large installations of remote Digi TransPort devices.

Digi Remote Manager is available for this device and offers web based device management for remote Digi cellular routers, gateways and third-party devices.

Features & Benefits

- Compact, flexible, low-cost 3G/4G/LTE enterprise router for remote and mobile networking applications
- Enterprise software with advanced routing protocols, VPN, and stateful firewall
- High-performance architecture, flexible power and extended operating temperature
- 3G/4G cellular interface supporting LTE and HSPA+ networks worldwide
- Redundant connectivity with dual SIMs and Digi SureLink™
- Digi Remote Manager® software for easy setup, configuration, and maintenance
- Digi Foundations™ 1-, 3- or 5-year subscription available

Part/SKU

WR21-M72B-DE1-SB



Digi Transport Router - WR31-M82A-DE1-TB

Intelligent 4G LTE router designed for performance and reliability in critical infrastructure and industrial applications such as: Building and process automation controllers, Smart grid assets (meters, switches, controllers), IP cameras and access controllers, Remote data loggers, flow meters and sensing equipment, Telco infrastructure and Traffic and obstruction lighting.

Software-defined, multi-carrier networking and global LTE and HSPA+ options make it easy to get connected.

The drop-in connectivity gives operators a way to reduce downtime and service calls, and also increase revenue by bringing distributed sites online faster.

Features & Benefits

- Global HSPA+ and 4G LTE support and certification on major carrier networks around the world
- Ethernet, serial I/O and Modbus bridging
- Extremely resilient cellular connection through Digi's patented SureLink™, VRRP+ protocol and dual SIM slots
- Dedicated GNSS Receiver supporting GPS, GLONASS, BeiDou, Galileo
- License-free enterprise software: VPN, firewall, logging and authentication
- Digi Remote Manager device management tool available
- Rugged enclosure, optimized for DIN rail or shelf mounting
- C1D2 and ATEX rated; NEMA TS2 temperature rated

Part/SKU

WR31-M82A-DE1-TB



IX14 – Industrial Router

Digi industrial routers provide the rugged, reliable network connectivity and remote management tools for heavy-duty applications such as precision farming, oil fields, industrial tanks, water treatment and construction.

Base Hardware on this device: (1) RJ45 Ethernet, (1) DB-9 RS-232 supporting a Category 1 EMEA cellular network.

Features & Benefits

- Transfer rate (max): 10 Mbps down, 5 Mbps up
- Power Connector: 2-pin Screw Terminal Block
- Dual sim for failover and flexibility
- MIL-STD-810G certified for shock, vibration, temperature
- IP54 rated for dust and water resistance
- Digi Trustfence Security as standard

Part/SKU
IX14-M301



Digi IX20 Industrial Cellular Router

The Digi IX20 is a cloud managed cellular router that provides primary and backup WWAN connectivity over software selectable multi-carrier LTE.

It offers advanced security features, dual SIM redundancy and management capabilities that make it suitable for PCI or NERC-CIP compliant applications. It is a versatile and purpose-built for industrial infrastructure, digital signage, retail kiosks, service terminals and other critical assets with a need for secure transactions.

The Digi IX20 can be managed with Digi Remote Manager® – a web-based device management platform that allows easy setup, mass configuration and maintenance for thousands of remote devices.

Features & Benefits

- Compact and economical industrial standard router
- Dual SIMs and Digi SureLink®
- Product comes with inbuilt Digi TrustFence® for security, identity and data privacy
- Dual Ethernet ports and single serial (RS-232) port

Part/SKU
IX20-WAG4



Digi Remote Manager

Digi's DRM Software offers secure monitoring and control of distributed IoT devices, inclusive of over air upgrades and problem diagnosis within a network.

DRM offers compatibility with virtually any cloud / analytics platform enabling fast deployment and management of your network application.

Features & Benefits

- Industry-leading cloud and edge tools for rapid device deployment and easier asset and inventory management
- Monitor network, device and asset performance and security with bi-directional communications
- Access data from edge devices that were previously out of reach and define precisely where you want the business logic
- Automate mass firmware and software updates to stay in compliance
- Integrate device data through open APIs to gain deeper insights
- Receive detailed reports and real-time alerts on network health and device conditions



Digi XBee 3 USB Adapter



Digi XBee 3 USB Adapter provides local connectivity to wireless Digi XBee networks from a laptop or PC, enabling local commissioning of the network and its devices.

The adapter is easy-to-use and provides users with a Wireless Personal Area Network (WPAN). Simply plug the adapter into the USB port of a laptop or PC for instant access to a Digi XBee network and its devices. This compact, USB-powered wireless adapter enables local network configuration, diagnostics and device monitoring.

Features & Benefits

- Programmable to communicate with any of Digi's supported wireless protocols
- Provides connectivity to local Digi XBee networks from a laptop/PC
- Enables fast local commissioning of devices on the local network
- USB powered
- LEDs for UART traffic and network association
- Recommended software: Digi Network Assistant, Digi XCTU

Part/SKU
XU3-A11

Digi XBIB-C Development Boards

Development board for XBee3®, USB-C, through-hole sockets (XBee module not included).

The XBIB-C Development Board utilises USB Direct Mode for use with XBee3® Cellular Modules. The XBIB-C Boards feature a temperature and humidity sensor with MicroPython control.

Features & Benefits

- USB-C or battery power options
- Easy integration for the addition of XBee cellular modules
- Onboard current monitoring pins for testing power consumption.
- Onboard Grove adapter for use with Grove connector products

Part/SKU
XBIB-CU-TH



Anywhere USB Plus - AW08-G300 G300 G30e

Connect USB devices anywhere on a Local Area Network without a locally attached host computer. The Digi Anywhere USB Plus remote hub offers service users, simple and direct connection options for existing equipment.

With 2 other options available, Anywhere USB products have Gigabit Ethernet support for failover redundancy and network bonding with SFP+ ports in the 8 and 24-port models for higher speeds or fibre networks.

Features & Benefits

- Industry-leading connectivity solution
- Various mounting options (device dependent) with two power supply and Ethernet connection for failover
- Digi Remote Manager optionable - DRM is a web-based portal offering easy configuration and security management on devices
- Ideal for connecting USB devices over the network in virtualized environments such as; VMware
- Access and monitor USB and serial devices over TCP/IP Connection

Part/SKU
AW08-G300



Industrial Cellular VPN Router R1510 | R151 151e

This 4G IoT cellular gateway provides a high speed wireless network for devices need a wireless connection. Internet connection options include; Ethernet, Wi-Fi & Cellular. This device also offers an auto-failover feature enabling a stable wireless network connection.

The R1510 has many unique software innovations including, but not limited to:

- RobustVPN – innovative use of Open VPN tunnelling to provide a fixed IP address on *any* SIM Card
- RCMS – Robustel’s Cloud management platform – essential for managing an estate of routers; **basic version is free**
- Data Guard – critical ‘failsafe’ that stops unexpected data over usage within seconds of a threshold being breached
- Smart Reboot – essential backup solution for when your roaming SIM card doesn’t roam

Features & Benefits

- Dual Ethernet port (LAN + WAN) 3G/4G router
- Various pre-designed software options available
- Competitively priced
- Highly stable 2G/3G/4G cellular connections
- Free cloud management platform – RCMS
- Full SMS control for diagnosis and recovery from data network problems.
- Fully programmable Linux environment with excellent SDK Documentation
- Small footprint with wall mounting and din rail mounting options available

Part/SKU
R1510



Industrial Dual SIM Cellular VPN Router - R2000 | R200 200e

The Robustel Industrial Dual SIM Cellular VPN Router is a rugged cellular router offering state-of-the-art mobile connectivity for machine to machine (M2M) & IoT applications.

Developed with a Robustel and Linux-based operating system (Robust OS) this router also offers a Software Development Kit (SDK) for partners and customers to allow additional customization by using C, Python or Java. It also provides rich Apps to meet fragmented IoT market demands.

Features & Benefits

- Dual SIM redundancy for continuous 2G/3G/4G cellular network connections

Part/SKU
R2000



Industrial LoRaWAN Gateway

Robustel R3000 LG is an industrial-grade LoRaWAN gateway, allowing access to various types of LoRa application nodes. The gateways support wired Ethernet and wireless 4G/3G/2G access to the cloud platform and providing users with long-distance data transmission services.

Features & Benefits

- Dual sim
- Supports global LoRaWAN frequency bands & compatible with LoRaWAN private protocol
- Compatible with any LoRaWAN cloud server
- Up to 8 channels supporting receive data simultaneously
- TPH6700 Housing optional

Part/SKU
RS3000-LG



High Speed Smart LTE / LTE-A Router



This High Speed Smart LTE /LTE-A Router from Robustel provides a rugged solution for applications needing cellular routing and boasts state-of-the-art mobile connectivity for IoT applications. Perfect for applications including but not limited to; data monitoring devices, sensor applications, digital signage and security cameras. Built on Robustel's self developed - Linux based operating system ""Robust OS"" the router provides an excellent user experience whilst developing their IoT application.

Features & Benefits

- Supports WWAN, WAN, WLAN link backup and ICMP detection
- Supports cold backup , warm backup and load balancing
- RobustOS + SDK + App
- IPsec/OpenVPN/GRE
- 4 Ethernet ports, + 1 RS-232 + 1 RS-485 + Bluetooth
- Management and maintenance via Web/CLI/SNMP/RCMS
- Desktop, wall mounting or DIN rail mounting options available

Part/SKU

R2110

USB 4G Dongle

Robustel's 4G USB Dongle is suitable for applications requiring global deployment, providing a secure 1-2-1 internet connection with download speeds of up to 150Mbps and upload speeds of up to 50Mbps. The device offers a micro SD card slot which allows the user to add up to 32Gb of removable storage.

Suitable applications include: Telemedicine, UAV, Intelligent Manufacturing, Vehicle Navigation, Logistics, Intelligent Agriculture.

Features & Benefits

- Long term availability - unlike commercial alternatives
- Category 4 device, with Qualcomm MDM9225 chipset
- Web UI and online upgrade, configure through Web & Device
- Dimensions: 93.8 * 28.6 * 13.5mm
- Supports:
 - LTE-FDD/TD-LTE/UMTS/GSM networks
 - 4G LTE-FDD B1/B2/B5/B4/B28/B7MHz & LTE TDD: B40(B38 or B41)
 - 3G UMTS 850/1900/2100/900MHz



Part/SKU

MF833V-WTW

Robustel Cloud Manager Service (RCMS)

Robustel Cloud Manager Service (RCMS) is a modular IoT cloud platform compatible with all Robustel products.

RCMS is designed from the ground-up to empower Robustel customers to build their IoT Solution(s) in a manner that is scalable, cost effective and can evolve quickly with the market.

Designed to work hand-in-hand with RobustOS, RCMS unlocks the true potential of Robustel products giving customers the ultimate range of monitoring, management and control functions.

With it's modular design RCMS enables new APPs to be added to the platform without interfering with core behaviour, to create new functionality and allow for integration with third-party software.

Packages Available: RCMS Basic, RCMS Essentials, RCMA Advanced



CELLULAR MINI PCIe RANGE

Quectel's Mini PCIe range include a variety of Long Term Evolution modules mounted onto a Mini Card form factor, which is cost effective and saves time when adding the device to your PCB.

Products come complete with a rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 7/8/8.1/10, Linux, Android/eCall) extend the applicability of the module to a wide range of M2M and IoT applications such as industrial router, industrial PDA, rugged tablet PC, video surveillance, and digital signage.

EC21 Mini PCIe

Features & Benefits

- Category 1 LTE, ideal for IoT applications not reliant on high speed connectivity
- M2M optimised speeds of 10Mbps downlink and 5Mbps uplink
- Integrated GNSS (Qualcomm® IZat™)
- Worldwide LTE, UMTS/HSPA(+) and GSM/GPRS/EDGE coverage
- Making the device backward-compatible with existing EDGE and GSM/GPRS networks, ensuring that it can easily migrate from LTE to 2G or 3G network

Part Variants

EC21EFA-MINIPICIE
EC21EUGA-MINIPICIE
EC21ECGA-MINIPICIE
EC21EUXGA-MINIPICIE
EG21GGB-MINIPICIE
EC21AFA-MINIPICIE
EC21VFA-MINIPICIE
EC21AUFA-MINIPICIE
EC21AUXGA-MINIPICIE
EC21AUTFA-MINIPICIE
EC21JFA-MINIPICIE
EC21KLFA-MINIPICIE



EC25 Mini PCIe

Features & Benefits

- Category 4 LTE, created for broadband IoT applications
- 150Mbps downlink and 50Mbps uplink data rates
- Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- Various backward compatible variants: EC25-E, EC25-EU, EC25-EUX, EC25-J, EC25-A, EC25-V, EC25-AF, EC25-AFX, EC25-MX, EC25-AU and EC25-AUX

Part Variants

EC25EFA-MINIPICIE
EC25EUGA-MINIPICIE
EC25ECGA-MINIPICIE
EC25EUXGA-MINIPICIE
EC25AFA-MINIPICIE
EC25AFXGA-MINIPICIE
EC25VFA-MINIPICIE
EC25AUFA-MINIPICIE
EC25JFA-MINIPICIE-DCM
EC25JFA-MINIPICIE-SBK



Data/specification per device available on request



EG21 Mini PCIe

Features & Benefits

- Global Category 1 LTE module, with 3GPP Rel.11 LTE technology
- Data rates up to 10Mbps downlink and 5Mbps uplink
- Compatible with Quectel UMTS/HSPA+ UC20/UC200T versions enabling easy migration solution to devices no longer recommended for new designs

Part Variants

EG21GGB-MINIPICIE

EG25 Mini PCIe

Features & Benefits

- Global Category 4 LTE module with 3GPP Rel.11 LTE technology
- Data rates from 150Mbps downlink and 50Mbps uplink data rates
- Worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage
- Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- Feature refinements: supports DFOTA*, eCall and DTMF
- MIMO technology meets demands for data rate and link reliability in modem wireless communication systems

Part Variants

EG25GGB-MINIPICIE-S
EG25GGB-MINIPICIE-S



BG95M3 Mini PCIe

BG95 Mini PCIe is a multi-band LTE Cat M1/Cat NB2/EGPRS module adopting standard PCI Express® Mini Card form factor (Mini PCIe).

With high integration level and a cost-effective SMT form factor of 51.0 mm × 30.0 mm × 4.9 mm, BG95 Mini PCIe enables integrators and developers to easily design their applications and take advantage from the module's low power consumption and mechanical intensity.

Features & Benefits

- Multi-band LTE Cat M1/Cat NB2/EGPRS module with global coverage
- Maximum data rates of 588 kbps downlink and 1119 kbps uplink
- Ideal for manufacturers to easily integrate wireless connectivity into their devices
- Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- Fast time-to-market: reference designs, evaluation tools and timely technical support minimize design-in time and development efforts
- Robust mounting and interfaces

Part/SKU

BG95M3LA-MINIPICIE



BG96 Mini PCIe

As with BG95, Quectel's BG96 Mini PCIe offers a form factor of 51.0mm × 30.0mm × 4.9mm and an easy integration level. A cost effective and time efficient device that's easily attached to a PCB.

Features & Benefits

- Maximum data rate of 375Kbps downlink and 375Kbps uplink
- Ultra-low power consumption.
- Easy migration from Quectel GSM/GPRS, UMTS/HSPA and LTE modules
- Fast time-to-market: reference designs, evaluation tools and timely technical support minimize design-in time and development efforts

Part/SKU

BG96MA-MINIPICIE
BG96MA-MINIPICIE-S



As one of the fastest growing technology solution providers, Technexion's modular range can be easily integrated into your product, enabling you to reduce development costs and achieve a fast to market solution.

Technexion's R&D team continue to develop their products to keep pace with everchanging technology in order to offer product longevity to their customers.

Using their plug and play range below offers the additional benefit of easy product upgrades.



Qualcomm Atheros QCA-9377 CLIX module

WiFi & Bluetooth Module featuring the Qualcomm QCA9377 offering a combination solution to support 1 × 1 802.11a/b/g/n/ac WLAN standards and Bluetooth 5.0 + HS, complete with onboard antenna, designed to deliver superior integration of WLAN/Bluetooth and low-energy technology.

Features & Benefits

- Dimensions 20x25mm
- Connected via Hirose 40-pin connector for easy installation
- Pre-certified and compliant with: FCC ID: 2AKZA-QCA9377
TELEC: 201-180629
EN 300 328 v2.1.1
ROHS & REACH compliant

IC: 22364-QCA9377
EN 55032 / EN 55024
EN 301 893 v2.1.1
RCM

Part/SKU
CLIX-9377



Stix-9377 Certified Modules

All your IoT multi-mode wireless communication needs in one compact and certified module featuring M.2 Key or Mini PCIe connection. Includes; WiFi, Bluetooth connectivity and on-module antenna, on a compact footprint.

Based on Qualcomm Atheros QCA9377, the series, offers the latest and most stringent security and robust radio performance for noisy industrial environments.

Supports various operating systems including; Linux, Yocto, Ubuntu, Android, Windows 10 & commercial Linux.

Various power consumption dependent on configuration.

Features & Benefits

- Qualcomm Atheros QCA9377 Wi-Fi 5 - 802.11 a/b/g/n/ac
- Qualcomm Atheros QCA9377 Bluetooth
- Certified for; USA, Canada, Japan, European Union, Australia/ New Zealand
- Compliant with ROHS / REACH directives
- Signalling modes: I²S | SDIO | UART

Part Variants

STIX-9377-M2-AE | Form Factor: M.2 KEY-E Type 2230 (22x30mm)
STIX-9377-M2-B | Form Factor: M.2 KEY-B Type 2242 (22x30mm / 22x42mm)
STIX-9377-MPCIIE | Form Factor: mini-PCIe Half Size (30x26.8mm)



Wave 2 - Wi-Fi & Bluetooth Module



Part/SKU
WNFT-237ACN(BT)

Wave 2 - 802.11ac, a/b/g/n dual-band WiFi + Bluetooth M.2 (Key A,E) module based on Realtek RTL8822CE chipset and supports multiple drivers (Android/ Windows/ Linux) for various platform.

This module supports MU-MIMO, dual band 2.4GHz or 5GHz. It incorporates the latest Bluetooth version, 5.0. and WiFi data rates up to 867Mbps on ac mode. The WNFT-237ACN(BT) is designed by M.2 2230 slot type form factor.

Features & Benefits

- Pre-certified
- Dimensions: 22mmx30mmx2.0mm
- Supports Multiple drivers (Android/Windows/Linux)
- Supports Simple Pairing (SP) and Enhanced Inquiry Response (EIR) function
- Low Power

WiFi & Bluetooth Combo Mini PCIe Module

Development board for XBee3®, USB-C, through-hole sockets (XBee module not included).

High performance, industrial grade WiFi & Bluetooth combo mini PCIe module with multiple outputs from SparkLAN. This low power device was designed to provide superior integration of WLAN/ Bluetooth technology. The WPEA-251ACNI(BT) supports both Windows and Linux platforms.

Example applications include; medical devices, security systems, industrial PC, Point of Sale, digital signs, set-top/net-top box, embedded/ tablet PC's, Vehicle mounted front, Robot/ Intelligent Gateway, Gaming machine, etc.

Features & Benefits

- Industrial-Grade (-40°C ~85°C)
- Adopts the latest 802.11ac solution
- Dual band AC on 2.4GHz+5GHz and incorporates the latest Bluetooth 5.0
- Download speeds of 300Mbps on N networks and 867Mbps on AC network
- Qualcomm chipset
- Integrated Security\; 64/128-bits WEP, WPA, WPA2, WPA3, 802.1x



Part / SKU
WPEA-251ACNI(BT)

Dual Band M.2 2242 B, Key Module

Dual band M.2 2242 B, key module based on Qualcomm Atheros QCA6174A chipset. This highly integrated module supports most of WLAN capabilities with seamless roaming and advanced security for enterprise application, on M.2 interface for seamless on board integration.

Example applications include IPC/ Advertising machine/ OTT/ IPTV/ DVB/ STB / DV/ Mini Driving Recorder/ Intelligent Projector Pico/ VR/ AR terminal/ POS machine/ Vehicle mounted front/ Rear Terminal UAV/ Robot/ Intelligent Gateway/ Smart city and other electronic products.

Features & Benefits

- Supports Windows & Linux software platforms
- Dual band - WiFi & Bluetooth
- 2 Antenna's - IPEX MHF1 connectors
- Industrial grade operating temperature -40°C ~85°C
- Dimensions - 42mm(±0.3mm) x 22xmm(±0.3mm) x 2.78mm(±0.3mm)



Part/SKU
WNFQ-262ACNI(BT)

Wireless LAN & Bluetooth Module



Part/SKU
WUBT-236ACN(BT)

Wireless LAN (WLAN), Bluetooth USB module that boasts dual band RF in a single chip USB module. The WUBT-236ACN(BT) module provides a cost effective solution for M2M (machine to machine) connectivity product/device by one USB port, it can be easily integrated into the most familiar operation system (Android/Linux/Windows).

Example applications include portable handheld devices, thin client computer, medical devices, network security & monitoring, 3D printer, TV, STB, POS, digital signs, gaming machine, robotic machinery, industrial tablets, weighing machine.

Features & Benefits

- Chipset: Realtek RTL8822BU-CG
- Antenna: 2 x IPEX connectors or Printed Ant., 2T2R
- Interface: WLAN: USB ; Bluetooth 4.2: USB
- Output Power up to 15dBm
- Downloadable drivers available

M.2 2230 - WiFi 6/Bluetooth 5 Module

With NEW WiFi 6 technology this module (on half PCIe card) allows efficient allocation of low data-rate connections, whilst improving the battery life of IoT sensors, and extending the range of Wi-Fi signals. The new 802.11ax standard with its unique features such as OFDMA, 256QAM, Target Wake Time (TWT). WPEB-265AXI(BT) series enables smooth streaming of high-resolution videos, fewer dropped connections and faster connections farther away from the router and in dense environments.

Bluetooth 5 provides doubles data rates speed for faster transmissions thereby reducing the overall power consumption. Additionally, Bluetooth 5 adds new enhanced data broadcasting enabling seamless services.

Features & Benefits

- Chipset: Broadcom
- Antenna: 2 x IPEX MHF1 connectors, 2T2R
- Interface: PCIe: WLAN; USB or UART: Bluetooth
- Output Power up to 18.5dBm
- Support: Linux, Android



Part/SKU
WPEB-265AXI(BT)

Half-Sized Mini PCIe Wi-Fi 6/Bluetooth 5 Module

WiFi 6+Bluetooth 5.0 M.2 2230 (KEY E) Module supports Multi-User MIMO (MU-MIMO) technology to increase channel capacity when simultaneously servicing multiple devices using the same frequency chunks and can accomplish up to speed of 1200Mbps with dual stream. Bluetooth 5 features including Low-Energy 2 Mbps and Low-Energy Long Range. Furthermore the included PCIe interface for Wi-Fi, UART/PCM interface for Bluetooth.

Applications include; medical devices, security systems, industrial PC, Remote control, digital signs, STB, embedded / tablet PC's, smart devices, Smart manufacturing, shop, Home, TV.

Features & Benefits

- Chipset: Broadcom
- Antenna: 2 x IPEX MHF4 connectors, 2T2R
- Interface: PCIe: WLAN; UART: Bluetooth
- Output Power up to 18.5dBm
- Support: Linux, Android



Part/SKU
WNFB-265AXI(BT)

4G LTE Global USB Modem



Compact in size, not in capability! This USB modem provides connectivity anywhere and is ideal for remote workers needing a reliable connection to high speed 4G LTE (Cat18).

The device is also perfect to use as failsafe technology for PoS Systems, Vending Machines and a variety IoT devices where reliability is imperative. The inbuilt GPS function also allows for tracking applications.

MiFiQ technology, ensures security and provides onboard VPN.

Wireless Technology

4G LTE:	Bands 1, 2, 3, 4, 5, 7, 12, 13, 14, 17, 18, 20, 28, 29, 30, 66
4G:	HSPA+ with enhanced backhaul
3G – UMTS:	850/900/1800/1900/2100MHz
SIM type:	Nano

Features & Benefits

- Provides peak download speeds of 480 Mbps
- Easy to use with no software needed, plug and play device
- Instant connectivity
- Durable swivel hinge for any USB port orientation
- Qualcomm Snapdragon X20 Chipset Processor - 1.4GHz single core
- Memory: 4GB RAM
- Operating System: Linux - Yes
- Dimensions: 3.59" x 1.46" x 0.45"
2.39 ounces

Part/SKU
USB800

Wi-Fi 6



What is Wi-Fi 6?

Wi-Fi these days has established itself as the universal standard for connecting mobiles, laptops, tablets and other devices to a local area network.

Wi-Fi 6 (802.11ax) is the latest version of Wi-Fi and brings the promise of increased speed, low latency, improved aggregate bandwidth and advanced user traffic management which will help reduce disconnects.

While it has some similarities with 5G, both are based on OFDMA (Orthogonal Frequency Division Multiple Access), Wi-Fi 6 is less prone to interference than previous WiFi standards, requires less power (which prolongs device battery life) and has improved spectral efficiency. Basically, it is better at packing data into a signal.

WiFi 6 offers full support for technologies like MU-MIMO (multiuser - multi input, multi output) connection quality will vastly improve for compatible mobile devices, which should also speed up content delivery. WiFi 6 is also backwards compatible with older WiFi standards

The reality is that the two are largely complimentary with an overlap for some user cases, which will make for an interesting competitive environment through this year and into later 2020s.

Solid State Supplies are here and ready to support you on these technologies with products in their portfolio from companies including Quectel, Sparklan, Microchip, Silicon Labs, Redpine, Digi, Robustel, D-Link Antenna, 2J Antenna and many others.

Lighting

Manufacturer	Part/SKU	Driver	LED	Lens	UVA	UVC	Infrared	Footprint	Radiation/Power Output	Wavelength	Specifics	Page Reference
Fulham	L05011i2	•							20W			32
Fulham	L05023A	•							24W			32
LED Engin	LZ1-10UV0R-0000		•		•			4.4 x 4.4mm	1930mW	365nm		33
LED Engin	LZ1-10R602-0000		•				•	4.4 x 4.4mm	1350mW	850nm		33
LED Engin	LZ4-40R608-0000		•				•	7 x 7mm	5250mW	850nm		-
LED Engin	LZC-B3MD07-0000		•					9 x 9mm	340lm 430lm 100lm 600lm	620nm 525nm 460nm 5500k	Red Green Blue Daylight White	34
LED Engin	LLSP-1T06-H			•								34
LED Engin	LLNS-1T08-H			•								34
Luminus	XBT3535		•					3.5m x 3.5mm	45mW	275nm		32



LED Driver 20W



Features & Benefits

- Wide output voltage range 6 - 42 Vdc
- Wide range of current settings 100 - 1200 mA
- 0-10V-, 1-10V-, potentiometer- and pulse dimming
- Suitable for warm dimming (natural toning/ dim-to-warm) LEDs
- Max inrush current 327 mA | Zero ripple current
- Dual stage topology
- Active overcurrent protection
- Up to 85 % efficiency across a wide range of loads
- Power factor > 0.95
- SELV
- ENEC certified
- Engineered and Manufactured in Europe

Part / SKU
L050112

LED Driver 25W - Mains Dimmable, 100 - 1050 mA

Features & Benefits

- Wide output voltage range 3 - 43 Vdc
- Wide range of current settings 100 – 1050 mA
- Mains- (trial, trailing edge and leading edge) dimming
- Zero ripple current
- Automatic dim mode detection
- Suitable for warm dimming (natural toning/ dim-to-warm) LEDs
- Max inrush current 370 mA
- Dual stage topology
- Thermal protection: dimming instead of switching off
- Open circuit output voltage protection
- Up to 83 % efficiency across a wide range of loads
- Power factor >0.9C

Part / SKU
L05023A



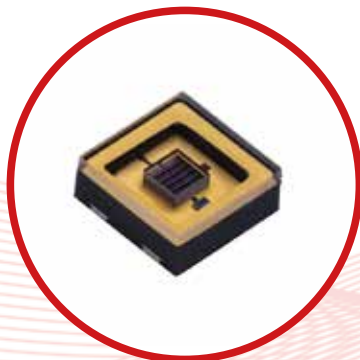
Luminus Devices – XBT3535 275nm LED- 45mW

Luminus UV-C LEDs are highly efficient, have compact form factors and enable applications such as healthcare disinfection, water and air purification, and surface disinfection of consumer appliances.

Features & Benefits

- High power UVC LED with emission wavelength between 275 nm and 285 nm
- Compact form factor: 3.5 mm x 3.5 mm package
- Drive currents up to 800mA
- Wide viewing angle of 120 degrees
- High Reliability package
- Standard SMD Process
- RoHS and REACH compliant

Part/SKU
XBT3535



LED Engin - 365nm Ultra Violet LED

This Ultraviolet LED emitter provides superior radiometric power in the wavelength range specifically required for sterilization, dental curing lights, and numerous medical applications.

With a 4.4mm x 4.4mm ultrasmall footprint, this package provides exceptional optical power density. The radiometric power performance and optimal peak wavelength of this LED are matched to the response curves of dental resins, inks and adhesives, resulting in a significantly reduced curing time. The patented design has unparalleled thermal and optical performance. The high quality materials used in the package are chosen to optimize light output, have excellent VIOLET resistance, and minimize stresses which results in monumental reliability and radiant flux maintenance

Ideal applications include: Curing; Currency verification; Dental; Fluorescence Microscopy; Forensics; Inspection; Leak detection; Medical & Sterilisation

Features & Benefits

- Highest flux density 365nm UV LED emitter
- Ultra-small foot print – 4.4mm x 4.4mm
- Surface mount ceramic package with integrated glass lens
- Very low Thermal Resistance (4.2°C/W)
- JEDEC Level 1 for Moisture Sensitivity Level
- Lead (Pb) free and RoHS compliant
- Emitter available on star MCPCB (optional)

Part/SKU

LZ1-10UV0R-0000



Infra Red Dual Junction LED - 4.4mm x 4.4mm

The Dual Junction Infrared LED emitter generates up to 1350mW nominal output at 3.2W power dissipation in an extremely small package.

With a 4.4mm x 4.4mm ultra-small footprint, this package provides exceptional radiant flux density. The patent-pending design has unparalleled thermal and optical performance. The high quality materials used in the package are chosen to optimize optical performance and minimize stresses which results in monumental reliability and flux maintenance.

The robust product design thrives in outdoor applications with high ambient temperatures and high humidity

Ideal applications include: Surveillance Cameras; Traffic Management; Gesture Recognition; Machine Vision; & Biometric Sensing

Features & Benefits

- 850nm Dual Junction Infrared LED
- Ultra-small foot print – 4.4mm x 4.4mm
- Surface mount ceramic package with integrated glass lens
- Very low Thermal Resistance (6.0°C/W)
- Very high Radiant Flux density
- JEDEC Level 1 for Moisture Sensitivity Level
- Lead (Pb) free and RoHS compliant
- Reflow solderable
- Emitter available on Standard or Miniature MCPCB (optional)

Part/SKU

LZ1-10R602-0000





Colour Spectrum LED

The patented design with thermally and electrically isolated pads has unparalleled thermal and optical performance. The high quality materials used in the package are chosen to optimize light output and minimize stresses which results in monumental reliability and lumen maintenance. The robust product design thrives in outdoor applications with high ambient temperatures and high humidity.

Ideal applications include: Architectural lighting; Entertainment; Stage & Studio lighting; & Accent lighting

Features & Benefits

- Ultra-bright, Ultra-compact 40W RGBW LED
- Individually addressable Red, Green, Blue and Daylight White channels
- Small high density foot print – 9.0mm x 9.0mm
- Surface mount ceramic package with integrated glass lens
- Exceptionally low Thermal Resistance (0.7°C/W)
- Electrically neutral thermal path
- Extreme Luminous Flux density

- JEDEC Level 1 for Moisture Sensitivity Level
- Lead (Pb) free and RoHS compliant
- Reflow solderable (up to 6 cycles)
- Emitter available on 4-channel MCPCB (optional)
- Recommended use with LLxx-3T08 family of High Efficiency / High Uniformity colour-mixing lenses for perfect colour uniformity from 8 to 32 deg

Part/SKU

LZC-B3MD07-0000

LED Lenses

The Spot TIR for the LZ4 Emitter Family & Narrow Spot TIR for the LZC Emitter Family open up new applications in stage and studio, architectural and down lighting. Both TIR lenses collimate the LED light into efficient, well-controlled light beams that maximize the usable lumens in the target area.

Not only does this lighting solution provide the throw or distance required for these lighting applications, it does so with a smooth, high quality beam of superior intensity uniformity, colour over angle mixing, and with an absence of discomfort glare or shadows. Furthermore, when coupled with LED Engin multi-colour RGBW, RGBA, RGB emitters, the lenses provide excellent in-source mixing for Dynamic Colour Entertainment and Architectural lighting applications.

LED Driver 20W

Features & Benefits

- Simple fastening of holder to MCPCB with appropriate adhesive, e.g. epoxy or polyurethane based
- 18° Spot Total Internal Reflection (TIR) optics specifically designed for LED Engin LZ4 4-die multi-colour emitter family
- Provides excellent colour uniformity and quantity of light in a beam
- Smooth light gradient eliminates hot spots and rings and minimizes glare for superior illumination
- UL-rated optical grade PMMA lens material allows use of high current and temperature conditions
- Lenses are available standard with holder that mount easily onto LuxiGen LZ4 MCPCBs



LLSP-1T06-H

LED Driver 20W

Features & Benefits

- Narrow Spot Total Internal Reflection (TIR) optics specifically designed for LED Engin LZC 12-die emitter family
- LLNS-1T08-H: 90 FWHM for mono-colour emitters
- Maximum Lux on Target™ and lumens in beam
- Provides the highest quality and quantity of light in a beam
- Lenses are available standard with holder that mount easily onto LuxiGen LZC MCPCBs



LLNS-1T08-H

Part/SKU

LLNS-1T08-H

Part/SKU

LLSP-1T06-H

Networking

Manufacturer	Part/SKU	Description	Port	Page Reference
Aaeon	FWS-7831	Platform network appliance for small to mid-range networks. Easy deployment anywhere without needing a dedicated rack.	8 ports	36
Aaeon	FWS-2275	Desktop networking device that can also be used as an edge computing solution or an IoT gateway.	3 ports	36
Aaeon	FWS-8600	Rackmount networking appliance, designed for powerful networking applications.	2 ethernet Upto 8 NIM slots	36
Aaeon	FWS-7360	Enterprise grade network appliance with Intel's "QuickAssist Technology" giving the user some of the most powerful software on the market.	7 ports	37
Aaeon	ICS-6270	DIN rail network appliance for industrial applications needing a robust and durable solution. Withstands operating temperatures of -40 to +75degrees.	6 port	37
Aaeon	FWS-2360	Desktop networking appliance with Intel C3000 processor and fibre optic technology for faster connectio speeds.	6 port	38
Aaeon	Various	A range of network interface modules offering a variety of solutions with PCI-Express connectors for easy integration.	Upto 8 ports	38
Digi	IT16-1002 IT48-1002	IT Infrastructure Management - dual ethernet, dual SFP+, dual power options.	16 & 48	39
Digi	70002258 70002268	Server Management for a variety of networking devices	8, 16, 32 & 48	39
Digi	70001949 70001951	Server Management for a variety of networking devices	8, 16, 32 & 48	40
Digi	70002388 70002323	Terminal server - serial-to-Ethernet integration of virtually any device into wired Ethernet networks.	8 & 16	40
Digi	70001949 7000195	Server management supporting serial to ethernet connectivity	8, 16 & 32	41
Digi	AW02-G300 AW08-G300 AW24-G300	Connectivity for your USB devices anywhere, without the need of a local host computer. Ideal for; portable scanning devices, PoS tech and printers.	2, 8, & 24	41
Microchip	PD-9501G	"Single port PoE midspan with upto 60W of power. IEEE 802.3at-compliant"	1 port	42
Microchip	PD-9001GR/ AT/AC-UK	Compact single port solution which provides remote power to a variety of applications.	1 port	42
Microchip	PD-9601G/ AC	Indoor PoE device for remote power on a variety of devices including high power applications.	1 port	42
Microchip	PD-9500G	High power terminal designed to provide connectivity and power to various networking devices.	6, 12 & 24	43
Microchip	PD-9524G	4-Pair Gigabit Midspan design to power networking devices. Energy efficient with the capability of dissipation of 50% less power.	24 port	43
Microchip	PDS-208G	Digital ceiling management system designed for PoE lighting systems in smart buildings.	8 ports	44
Microchip	PDS-408G	PoE switch designed for digital ceiling management like the PDS-208G but offering up to 60W for all 8 ports.	8 ports	44
Microchip	PDS-104GO	Outdoor switch providing up to 60W power over ethernet. IEEE 802.3at-compliant. IP66 outdoor rated.	4 ports	44
Orion Fans	OA300ST / OA600ST	Short fan trays with 3 or 6 fans, that come pre-assembled in a rack mountable trays, a great addition to any existing network.	N/A	45
Orion Fans	Various	Thermalcare fan tray range from orion fans are a pre-assembled solution mounted onto heavy duty steel frames. Can be customised to better suit specific applications.	N/A	45

1U Rackmount Intel® 8th Generation Platform Network Appliance

Aeeon's rackmount network appliances provide flexible network solutions with the power of the 8th Generation Intel Core and Xeon processors, these network appliances are built for UTM, SD-WAN, web monitoring, load balancing, and even Network Virtualization.

These systems offer unmatched flexibility in their class, and are designed to be easy to use and easily configured for small to mid-range network needs. With a shorter chassis, it can be deployed almost anywhere without need of a dedicated rack, perfect for small businesses or remote offices. It features eight built in LAN ports and a NIM slot, supporting up to 16 LAN ports in total.

Features & Benefits

- Configurable built-in LAN: 8x Gigabit Ethernet or 6x Gigabit Ethernet with 2x SFP
- Built for UTM, SD-WAN, Web Monitoring and Load Balancing
- A range of processors to choose from, from the dual core i3 up to six-core Xeon E-2 processors
- 2 x DDR4 SO DIMM/ECC Up to 32GB
- TPM Supported (Optional Request)
- RJ-45 Console x 1, USB 3.0 x 2, HDMI x1

Part/SKU
FWS-7831



Desktop Network Appliance

A compact system with 3 LAN Ports designed to power a range of applications for Industrial networking. The device can be used as an Edge Computing solution or alternatively, an Industrial IoT Gateway.

Built specifically for industrial environments, this devices comes as standard with an aluminium chassis, wide operating temperature range of 0°C to 50°C, and wide voltage input (9~24V). It can be easily integrated into industrial networks and includes on-board Wi-Fi, USB mini Console, and SIM card slot, as well as Digital IO and COM ports.

Features & Benefits

- Intel® Celeron® Processor N3350 SoC
- Onboard eMMC 16GB (Optional up to 32GB)
- Onboard LPDDR4, 2GB
- Intel® i211 GbE x 3
- 1 x Mini-Card Full Size Slot with SIM Socket
- Onboard WiFi 802.11 b/g/n 2x2, BT4.1
- HDMI Connector (Optional)
- TPM Supported (Optional)

Part/SKU
FWS-2275



2U Rackmount Network Appliance

Ideal for powerful networking applications inclusive of; UTM, SDN and NVF. This device is also capable of meeting high data needs needed for AI applications. It has four lockable hard drive bays, support for up to 512GB of RDIMM ECC RAM, and four NIM slots.

The Rackmount device is powered by Second Gen. Intel Xeon Scalable Processors and features swappable components such as; fans HDD trays, and power supplies - enabling easy maintenance and non stop operation.

Features & Benefits

- Dual 2nd Gen Intel® Xeon® Scalable Processors
- Intel® C621 Chipset
- 1GbE RJ45 Intel® i211 x 2, NIM slot x 4 (Project based up to 8 slots)
- IPMI supported by AAEON Module
- External Hotswappable 3.5" HDD Bay x 4, Internal 3.5" HDD Bay x 1
- Mini-Card slot x 1, M.2 2260 M-key x 1
- RJ-45 Console x 1, USB 3.2 Gen 1 x 2
- 550W ~ 600W Redundant Power

Part/SKU
FWS-8600



1U Rackmount Intel[®] 8th Generation Platform Network Appliance

This high-grade Network Appliance features Intel Quick-Assist Technology, allowing users access to some of the most powerful cryptographic software on the market. Thanks to a unique design feature, the device has two channels with an inbuilt capability to serve as either Mini PCIe slots or 1G LAN ports.



Features & Benefits

- 2 10Gb SFP+ (From CPU)
- Onboard 2 Pairs Bypass
- Mini-Card Socket (Full-Size) x 1
- Mini-Card Socket (Full-Size) with SIM Socket x 1 (Optional)
- Internal 2.5" SATA HDD x 2
- LCM with Keypad x 1, RJ-45 Console x 1, USB 3.2 Gen 1 x 2
- 100W Flex ATX PSU
- TPM (Optional)
- Designed with SDN, NFV, and vCPE application in mind
- WiFi and 4G LTE capabilities mean it serves employees working without a wired connection
- The FWS-7360 features built-in 10GbE SFP+ fibre cable ports
- The ports are connected directly to the CPU, so users have additional expansion slots
- The FWS-7360 can call on up to 16 processing cores, removing the danger of bottlenecks
- The advanced CPU also reduces the risk of cyber attacks and data loss
- 2 ports with both LAN and Mini PCIe functionality
- AAeon can deliver the setup buyers prefer without delays for system redesigns.
- The FWS-7360 is the only rackmount network appliance with this NFV-specific feature

Part/SKU
FWS-7360

Industrial-Grade DIN Rail Network Appliance

A robust industrial networking solution, designed to withstand harsh environments at temperatures between -40°C ~ 75°C.

Designed to shield against malware infection, PLC logic degradation, problematic modems and remote bases, hijacked interfaces, and compromised control systems.

Encased in a corrosion-proof steel case and featuring aluminium heatsink, for resistance against external elements, cooling and maximising air circulation.

Featuring 6 native LED LAN ports, USB 3.0 ports, a VGA port and an isolated COM port (RS-232/422/485), to provide expansion capability in addition to a 2Pin Terminal Block (+9~36VDC) located on the top panel. The DIN rail and wallmount enables easy physical deployment, ensuring hassle-free integration with existing hardware systems.

Ideal applications include: Industrial Cyber Security; Critical Infrastructure Protection; & Industrial Control Systems Security

Features & Benefits

- Intel[®] Celeron[®] Processor N3350 SoC
- 204-pin Dual Channel DDR3L 1866 MHz SODIMM x 1 up to 8GB
- 10/100/1000Base-TX Ethernet port x 6 (Supports up to 2 Pairs bypass)
- Supports up to Mini-Card Socket with SIM Socket x 1
- +9 – 36V DC Power Input Terminal Block
- Supports up to RS-232/422/485 COM Port x 2 with ESD Protection
- -40°C~75°C Operating Temp.

Part/SKU
ICS6270



Desktop Network Appliance with Intel C3000 Processor



An out of box solution with fibre optic technology for rapid connection speeds.

A user friendly device featuring Intel's latest security and compression technology (QAT), this user friendly device works exceptionally when used for; wireless gateway, SD-WAN, IPS, WAN Optimization, NFV and vCPE applications. With expansion options available such as WiFi and 4G LTE, the device is also fitted with a range of mass storage connections.

Features & Benefits

- Intel® Atom™ C3000 Series Processor Supports Dual and Quad Core
- DDR4 SODIMM/ ECC DIMM (Dual Core 1 Slot Quad Core 2 Slot)
- 4 Copper(88E1543) + 2 Copper(I211), optional 4 Copper(88E1543) + 2 Fiber(I210)
- 2 Pairs Bypass Support
- Mini PCIe with SIM Slot Support
- Internal 2.5" SATA HDD Bay x 1 (Optional)
- eMMC Support up to 16GB
- RJ-45 Console x 1
- USB 3.2 Gen 1 x 2 (Internal USB 2.0 x 1)

Part/SKU
FWS-2360

AC/DC Power Module Series

The Network Interface Module family from Aaeon which feature PCI-Express host interfaces and offer a multitude of solutions, tailored for virtual network deployment and management and have the capability to power a wide range of virtual machine devices.

Built to efficiently optimise the distribution and management of virtual workloads, the Network Interface Modules provide maximum scalability and reduce bottleneck impediments to the bare minimum.

Configured for the deployment of virtual machine device queues, these modules are ideally suited for the consolidation of virtual network traffic, and are easily integrated into existing hardware and architecture.

- NIM-S13E: Intel 82580EB PCI-Express 1G Fibre Ethernet 4 Ports Module
- NIM-S13D: Intel 82580EB PCI-Express 1G SFP 4 Ports Module
- NIM-S13C: Intel 82580DB PCI-Express 1G SFP 4 Ports Module
- NIM-S13B: Intel 82580EB PCI-Express 1G SFP 8 Ports Module
- NIM-S13A: Intel 82580EB PCI-Express 1G SFP 8 Ports Module
- NIM-S26C: Intel XL710 PCI-Express 10G SFP+ 4 Ports Module
- NIM-S26B: Intel XL710 PCI-Express 40G QSFP 2 Ports Module
- NIM-S26A: Intel XL710 PCI-Express 10G SFP+ 4 Ports Module
- NIM-C13B: Intel 82580EB PCI-Express 1G Copper Ethernet 8 Ports Module
- NIM-C13A: Intel 82580EB PCI-Express 1G Copper Ethernet 8 Ports Module
- PER-C41L: Intel 82580EB PCI-Express 1G Copper Ethernet 4 Ports Module
- PER-C40L: Intel 82580EB PCI-Express 1G SFP 4 Ports Module
- PER-C39L: Intel 82580EB PCI-Express 1G SFP 8 Ports Module
- PER-C38L: Intel 82580EB Colay w/ Intel i350 PCI-Express 1G Ethernet 8 Ports Module
- PER-C36L: PCI-Express Gigabit Ethernet Module w/ Intel i210 Controller
- PER-C35L: Two PCI-Express 10 Gigabit Ethernet Acceleration Module



Digi Connect IT 16/48

Networking needs including cabling, deployment and maintenance simplified with minimal downtime using Digi's Connect IT device. Available in 16 & 48 serial port options.

This high performance device with dual Ethernet, dual SFP+ and dual power (field replaceable) provides a robust and resilient solution for demanding IT infrastructure management applications.

Various power supply kits and accessories are available to easily integrate the device into your existing application. Software selectable reversing serial cable pinout allows straight-through connectivity to most IT infrastructure devices.

Features & Benefits

- Digi CORE LTE modems support Cat-M, Cat 1, Cat 4 and Cat 6 in multiple regions
- Power supply kit provides dual replaceable redundant internal power
- Digi Connect IT 16 – (16) RJ-45 RS-232 (standard/reversed mode selectable)
- Digi Connect IT 48 – (48) RJ-45 RS-232 (standard/reversed mode selectable)
- Digi Foundations™ 1-, 3- or 5-year subscription available
- Dimensions: 444 mm x 300 mm x 44 mm (17.48 in x 11.81 in x 1.73 in)

Part/SKU

IT16-1002

IT48-1002



Digi Passport Console Server

Secure and reliable management for servers, routers switches, firewalls and various networking devices. Digi's Passport Console offers remote access for computer systems and networks.

Offering serial console connections and service processing connections to the leading server vendors, whilst having the capability of communicating with virtually any server or device, the Digi Passport is ideal for cross-platform equipment support.

Users can remotely power connected devices, reboot servers, and receive notifications of changes in power usage, temperature readings, system reboots and more.

Recommended products include; Digi CM, Digi Portserver TS, Digi Connect Port (8, 16, 32 serial port options and Digi Connectport TS (in 8 & 16 serial port option).

Features & Benefits

- Network-based graphical access to servers
- Secure data centre server management
- Server Technology and APC power distribution units (PDU) compatible for remote power management
- Ideal tool for system administrators
- Supports all common operating systems including Linux®, Windows Server® 2003, Mac OS® X, Solaris®, UNIX
- SSH and SSL/TLS ensure secure connections
- Port buffering/logging for detailed troubleshooting
- Secure clustering allows multi-server access via one IP address
- Advanced customisable scripting
- Dual Ethernet and optional dual power provide redundant connectivity and power
- IPv4/IPv6 dual stack
- Configurable email/pager alerts and SNMP traps



Part/SKU

70002258 – Digi Passport 8

70002268 – Digi Passport 8 with Modem

Also available with 16, 32, 48 serial port options – P/N's available on request.

Digi CM Console Server

Secure band management for most networking devices even if the network goes down. Users are able to control and monitor devices anywhere using the corporate TCP/IP network, the Internet or dial-up modem connections. The CM Console server is easy to integrate into most systems and is user friendly.



Features & Benefits

- Access and manage servers and devices via serial console port
- In-band and out-of-band console management
- 8, 16, 32 or 48 serial ports (RJ-45); DC and dual AC power
- SSHv2 server and client ensure secure access
- Secure clustering allows multi-server access via one IP address
- Sun, Cisco, IBM, HP, UNIX®, Linux® and Microsoft Windows Server® compatible
- TACACS+, RADIUS, LDAP, Kerberos, local user database provide centralised authentication
- Port buffering/logging for easy troubleshooting
- Straight-through CAT5 cabling for easy, hassle-free server connections
- PC Card slot for increased flash, or additional
- Ethernet/modem connection
- Email/pager alerts and SNMP traps

Part/SKU

70001949 - Digi CM 48

70001951 - Digi CM 48 - Dual AC

ConnectPort TS 8/16 Terminal Server

Providing secure and easy RS-232 or RS-232/422/485 serial-to-Ethernet integration of virtually any device into wired Ethernet networks.

Ideal applications include; automation, robotics control, centralized device monitoring and management, data acquisition, and point-of-sale applications requiring COM/TTY ports, serial tunnelling or TCP/UDP functionality.

Enhanced access control, management and configuration capabilities support key security requirements for critical infrastructure and distributed systems. A built-in Python environment enables application development and customization at the device level, including full device connection control, data manipulation and event based actions



Features & Benefits

- Dual IPv4/IPv6 stack
- 8 or 16 serial ports with Tx/Rx LEDs
- Patented RealPort® technology for COM/TTY port control/ management
- SSL/TLS and SSHv2 for added security
- Easy configuration and management through web browser or CLI
- Low latency connectivity for sensitive applications
- Easy-to-use Python development environment for custom applications
- Tx/Rx LEDs per serial port
- Dedicated console port
- Digi Remote Manager support
- SSL/TLS and SSHv2 for added security

Part/SKU

70002388 – ConnectPort TS 16

70002323 – ConnectPort TS 8

ConnectPort LTS 8/16/32 Terminal Server

Digi's next generation serial servers support GB Ethernet and IPv6 networks and reliability and flexibility within serial-to-ethernet connectivity.

Ideal applications include; security, property management, point-of-sale, data acquisition, industrial automation, power utilities, logistics and others.

Features & Benefits

- Dual GB Ethernet ports for routing
- Software selectable RS-232/422/485 (MEI models only) for industrial applications
- LCD display for status monitoring, diagnostics and configuration
- SD memory slot for data storage, supporting SD and HCSD
- Dual power option on 16-port MEI model
- Advanced software features include an IPv4/IPv6 dual stack, user port sharing, port logging, SSHv2 and SSL.

Part/SKU

70001949 - Digi CM 48

70001951 - Digi CM 48 - Dual AC



AnywhereUSB Plus

The perfect IoT Solution for your workspace.

For connecting your USB devices, such as; such as printers, scanners, and POS devices on a Local Area Network with the need of a local host computer being connected.

Using this now technology from Digi allows for an organised and effective workspace as computers can be centralised, virtualised or rack mounted.

Features & Benefits

- Network-attached USB hubs easily connect USB peripheral devices to a PC from remote or virtual hosts
- Ideal for connecting USB devices over the network in virtualized environments such as VMware®
- AnywhereUSB 24 Plus is rack mountable with two power supplies and Ethernet connections for failover redundancy
- Access and monitor USB and serial devices over TCP/IP connection
- Supports multi-host connectivity for each USB port or group independently
- Supports Digi Remote Manager® cloud-based management platform to deploy, monitor, manage and maintain a suite of peripherals and devices

Part/SKU

AW02-G300 - AnywhereUSB 2 Plus; dual USB 3.1 Gen 1 ports, single 10M/100M/1G Ethernet, 5 VDC

AW08-G300 - AnywhereUSB 8 Plus; eight USB 3.1 Gen 1 ports, single 10M/100M/1G/10G Ethernet, single SFP+, 12 VDC

AW24-G300 - AnywhereUSB 24 Plus; 24 USB 3.1 Gen 1 ports, dual 10M/100M/1G/10G Ethernet, dual SFP+, dual power 100-240 VAC





MICROCHIP

Single Port PoE Indoor Midspan

The single port PoE midspan provides up to 60 Watts of power over Ethernet and offers a IEEE 802.3at-compliant solution for remote powering of devices in 48VDC environment as well as high power applications. With the midspan's plug-and-play installation, it is an easy and cost-effective addition to an existing Ethernet infrastructure while at the same time providing flexibility to assurance a future-proof scalable network.



This device is designed specifically to power IEEE 802.11n and IEEE802.3at access points, pan-tilt-zoom (PTZ) and dome cameras, IP videophones, thin clients and other high power Ethernet end-terminals. It is also backward compatible and safe to use with any 802.3af terminal such as VoIP phones, IP cameras and wireless LAN access points. It can power both existing 10/100Base-T devices and emerging wireless Gigabit devices such as WI-MAX and wireless IEEE 802.11n access points.

Features & Benefits

- Data rates: 10/100/1000 Mbps
- Power input: DC
- Compact design
- Regulatory compliance: IEEE 802.3at (PoE), RoHS compliant, WEEE compliant, CE
- EMI: FCC Part 15, Class B, EN 55022 Class B (emissions), EN 55024 (immunity)
- Safety: GS Mark Per IEC60950

Part/SKU

PD-9501G

1-Port High-Power Base T Midspan

A single port, high-power solution for remote powering of current and emerging high power applications. Generating up to 30W.

The PD-9001GR enables remote power for a new range of applications including 802.11n Access Points, an-tiltzoom (PTZ) cameras and video-phones. It can power both existing 10/100Base-T network devices and emerging wireless 1000Base-T devices such as WiMAX and wireless IEEE 802.11n access points..



Features & Benefits

- IEEE 802.3at compliant with 2-event classification
- IEEE 802.3af backward compatible
- Output power of 30W is guaranteed
- Supports 10/100/1000Base-T applications
- Compatible with IEEE 802.3af devices
- Safe: low power devices receive only the power they need
- Automatic Detection and Protection of non-standard Ethernet terminals
- Compact design fits easily in WLAN Access Point and
- IP Cameras installations

Part/SKU

PD-9001GR/AT/AC-UK

1-Port PoH Midspan

A single-port indoor PoE injector used for remote powering of current as well as emerging high-power applications designed to power Poe compliant devices such as IEEE 802.11ax access points, Pan-Tilt-Zoom (PTZ) and dome cameras, IP videophones, thin clients and other high-power Ethernet end terminals requiring up to 90W of power and is backward compatible and safe to use with any IEEE 802.3af/at terminal such as VoIP phones, IP cameras and wireless LAN access points, powering 10/100/1000Base-T devices.



Features & Benefits

- IEEE 802.3af/at backward compatible
- Up to 90W of power over 4-pairs
- Plug-and-play installation

Part/SKU

PD-9601G/AC

PD-9500 9500 500e - 72W/Port Gigabit EEPoE Midspan Family for High Power Terminals



The PD-9500G EEPoE family is designed to power network devices such as IP cameras, access control systems, thin clients and other Ethernet powered devices (PD) that require up to 51W, while reducing power losses by almost 3W per link for 25.5W devices.

The PD-9500G series offer energy efficient PoE (EEPoE) Midspans are unique in their ability to deliver power over all 4 pairs of the Cat 5 or better cable, dissipating 50% less power than PoE Switches and 2-pair Midspans, while fully complying with the IEEE802.3at-2009 standard. EEPoE allows reduced power dissipation to new powered devices and also to the huge installed base of over 100 million existing IEEE standard compliant PDs worldwide. With the midspan's plug-and-play installation, they are easily and cost effectively implemented leveraging an existing Ethernet infrastructure while at the same time providing the assurance of a future proof network.

Features & Benefits

- Various port number availability; 6, 12, 24
- High Power over 4-pairs – 72W per port
- IEEE 802.3at Compliant with 2-event classification
- High efficiency, dissipating 50% less power than 2-pair switches and midspans
- PowerView Pro secure, remote SNMPv3 web-based management
- Supports both IPv4 and IPv6 addressing
- Cisco and legacy PoE support
- Plug-and-play installation
- Guaranteed uptime

Part/SKU

PD-9500G



PD-9500G

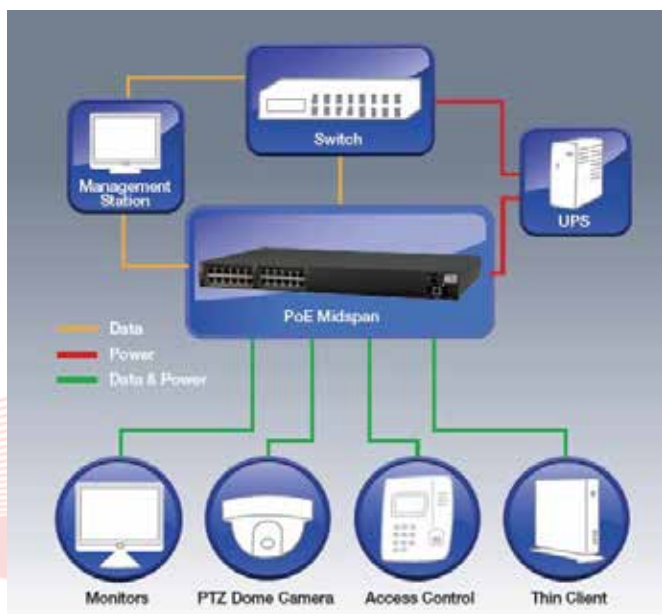


PD-9524G

24-Port 4-Pair Gigabit EEPoE Midspan with AC/DC Input (1000W)

Designed to power network devices such as IP cameras, access control systems, thin clients and other Ethernet powered devices (PD) that require up to 51W of power. It delivers power over all 4 pairs of the CAT5 (or better) cable.

This Energy Efficient PoE midspan dissipates 50% less power than conventional PoE switches and 2-pair midspans, while fully complying with the IEEE802.3at-2009 standard. It reduces power losses by almost 3W per link for 25.5W devices. The midspan's plug-and-play design simplifies installation.



Features & Benefits

- High power over 4 pairs (72W per port)
- IEEE 802.3at compliant with 2-event classification
- High efficiency, dissipating 50% less power than 2-pair switches and midspans
- PowerView Pro: Secure, remote SNMPv3 Web-based management software
- Supports both IPv4 and IPv6 addressing
- Cisco and legacy PoE support
- Plug-and-play design simplifies installation
- Guaranteed uptime

Part/SKU

PD-9524G

PDS-208 208G 208e - Fanless PoE switch for Digital Ceiling Management

Digital Ceiling is reshaping enterprises as the revolutionary PoE-based lighting system creates a new breed of smart buildings where everything is connected into a vast Internet of Things (IoT). Microsemi Digital Ceiling Switch Paves the Way for Smart Buildings with Enterprise IoT.

The Microsemi PDS-208G digital ceiling PoE switch offers an optimal and cost-effective solution for PoE lighting and other digital ceiling applications. It allows lighting fixtures and other Ethernet terminals to receive power and data over standard Ethernet cables in the most efficient way. Output PoE power can be configured per port, and the device supports full-power mode by providing 30W for eight ports simultaneously and any individual port can go up to 72W.

Features & Benefits

- 240 W of full-power PoE (IEEE 802.3at); 8 ports (30 W per port)
- Extra power per port - any individual port can go up to 72 W
- Fanless design - silent operation and enhanced reliability
- IEEE 802.3az energy-efficient-PoE 4-pair solution
- Data rates of 10/100/1000 Mbps
- Layer 2 switch - including 802.1Q-based VLANs enables segmentation of networks for improved performance and security
- Configuration and monitoring - Web management and SNMP
- Two Gigabit ports that can be used for uplinks



Part/SKU
PDS-208G


PDS-408 408G 408e

Like the PDS208G, Microsemi's PDS-408G is also a PoE switch for ceiling lighting, however this device offers 60W for all 8 ports simultaneously and any specific port can go up to 90W.

The 480W high-speed switch can be managed over Web, SSH, Telnet, CLI. It has 8 ports of 10/100/1000 Mbps (Gigabit Ethernet) with PoE BT ports, 2 Gigabit ports and one 1000M/100M SFP port.

Features & Benefits

- Digital ceiling PoE Switch : 8 PoE 10/100/1000mbps ports + 3
- Total available PoE power : 480W
- IEEE802.3bt compliant
- Supports legacy 60/90W PoE devices
- Full power of 8 x 60W - any individual port can go up to 90W
- Fanless design - enhanced reliability and silent operation
- High energy efficiency – very low power consumption in standby and in operation
- Layer 2 switch - including 802.1Q-based VLANs enables segmentation of networks for improved performance and security
- Remote management - Web and SNMP



Part/SKU
PDS-104GO

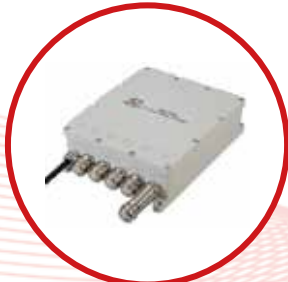
PDS-104 104G 04Ge - Outdoor PoE Managed Switch

The 4 port outdoor PoE switch provides up to 60 Watts of power over Ethernet and offers a IEEE 802.3at-compliant solution for outdoor WLANs, outdoor IP cameras, or outdoor P2P radios. With VLAN and RADIUS support, the PDS-104GO brings improved security and performance. It provides better safety through centralized management of user profiles and authorized system access. By regulating network traffic in each VLAN, the switch offers increased network performance.

The switch extends the reach between the switch and powered devices by an additional 100 meters, to a maximum of 200 meters—a major benefit in many applications. It offers lightning protection to the switch itself and to the indoor network.

Features & Benefits

- Simple & straightforward deployment - no need to open the unit during installation
- Remote Monitoring & Testing to control of the device's status
- Number of ports: 4 PoE ports + 1 SFP input port
- PoE output: 60W per port
- Data rates: 10/100/1000 Mbps
- Outdoor rated: IP66
- Integral surge protection



Part/SKU
PDS-104GO



A part of Knight Electronics, Orion Fans offer cost effective fan tray solutions. By offering a completed solution that can be easily integrated into a variety of applications including rackmount, system integration, networking, and telecoms equipment. Benefits of buying a fan tray include cost savings, and time to market.

Short Fan Trays

Offered with 3 or 6 fans that can be easily integrated into existing rack mount systems.

These products can also be upgraded to "Smart" Fan Control Trays. Designed to save energy within your device by sensing the ambient temperature and automatically adjusting the fan speed within 1600 - 2500 RPM. In addition to low power consumption, the fan tray offers a low noise solution and features ultra low speed operation.

Features & Benefits

- Lighted rocker switch
- Resettable circuit breaker
- Tray features 3 or 6 high performance sealed ball bearing fans
- Black wrinkle finish
- Operating Temp: -40 to +70 degrees
- Air Flow: 190 ~ 300
- 115V, 230V AC available
- 600,000 hour life expectancy
- Slides easily into any standard 19" rack

Part/SKU

OA300ST/OA600ST



Thermalcare Fan Trays

Orion's Thermalcare range are built using modular fan assemblies mounted onto heavy duty steel frames and offered with their "add a module" so that expansions can be easily implemented to accommodate the users needs.

Standard availability offers 3, 6 or 9 fan assembly for AC or DC and offer customisable operation options such as dual voltage, low noise and high-speed variants.

Other customisable options include the addition of fan monitoring and alarm systems for applications that can be difficult to access.

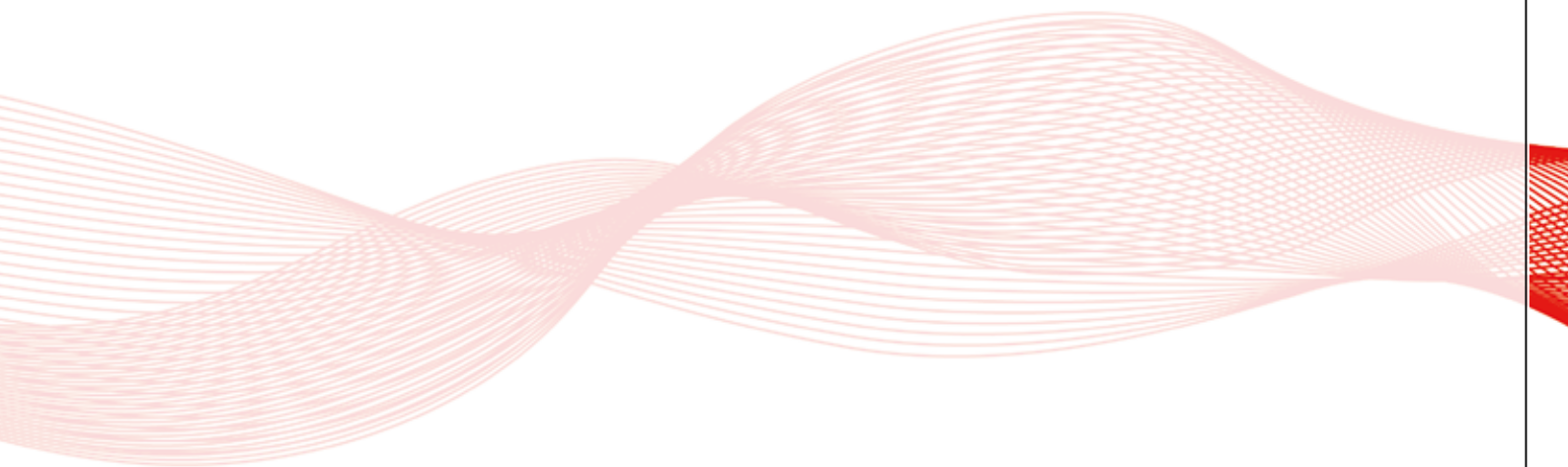
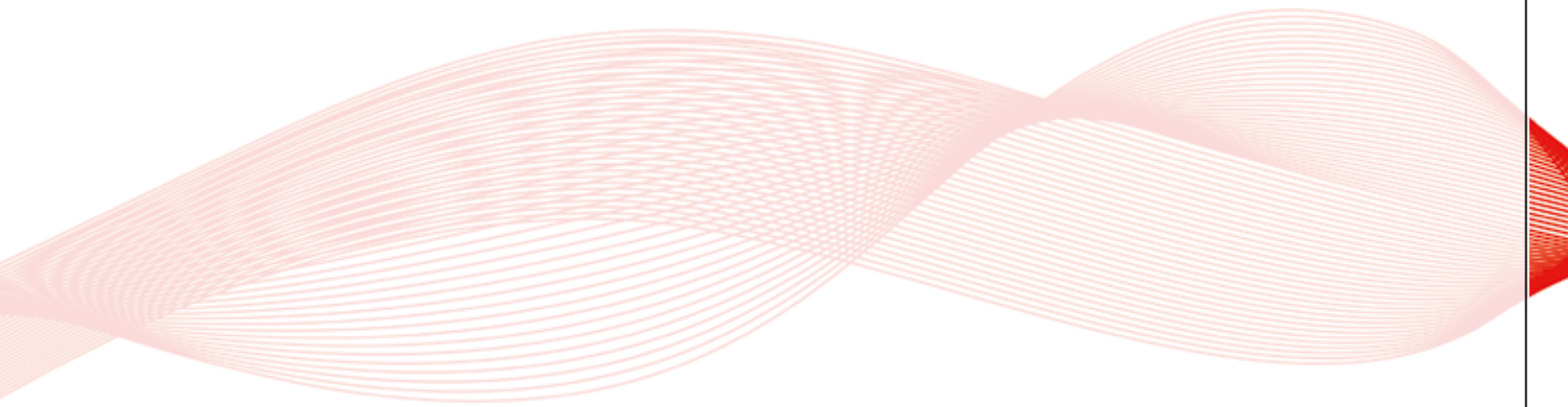
Features & Benefits

- Pre wired
- Heavy duty steel framing with extruded aluminium side rails
- Standard colour comes in black, however grey can also be requested by special order
- EZ mount clip nuts and fasteners
- Dual voltage selector switch
- Ultra high speed fans are available
- Medium/ Low speed fans can be substituted for low-noise applications
- Customisable options available in various configurations for specific requirements, design and build service available
- Power cord availability 115VAC & 230VAC



Part numbers available on request for:

AC Fan Trays – various
Dual Voltage AC Trays – various
DC Fan Trays



Power

Manufacturer	Part/SKU	Type	V In	V Out	Power	Additional Notes & Approvals	Operating Temp °C	Page Reference
Microchip	PD-9501G	POE	100-240	48	1 x 60W	FCC Part 15, Class B, EN 55022 Class B (emissions), EN 55024 (immunity), IEC60950	0 to +40	49
Microchip	PD-9001GR/AT/AC-UK	POE	100-240	48	1 x 30W	Single port	-20 to +40	49
Microchip	PD-9601G/AC	POE	100-240	48	1 x 90W	Single port	-10 to +44	49
Microchip	PD-9500G	POE	100-240	48	24 x 72W	6, 12 and 24 port options	0 to +40	50
Microchip	PD-9524G	POE	100-240	48	24 x 72W	24 port, UL/cUL per CSA/UL 60950-1, GS mark per IEC60950-1. 6 and 12 port options available	0 to +40	50
Microchip	PDS-104GO	POE	100-240	48	4 x 60W	4 port, IP66 rated for outdoor use, UL60950-1, UL-69950-22, GS Mark, GR-1089-CORE Issue 6, ITU-T K.20 6 kV on AC lines.	-40 to +50	51
Microchip	PDS-208G	POE	90-264	48	8 x 30W	Fanless, ceiling mount, UL/EN/IEC 60950-1	0 to +45	51
Microchip	PDS-408G	POE	100-240	48	8x 60W	Fanless, ceiling mount, UL/EN/IEC 60950-1 (ed.2) UL 2043, Plenum rating	0 to +45	-
Minimax	AKF-15S12	AC/DC	85-264	12	15W	EMI Emission EN 55011/32 Class B & FCC Level B EMC Immunity EN 61000-4-2,3,4,5,6,8,11 UL508 (Option) Specifically for Industrial Application UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking	-20 to +70	48
Minimax	AQF-30S42	AC/DC	85-264	48	30W	EMI Emission EN 55011/32 Class B & FCC Level B EMC Immunity EN 61000-4-2,3,4,5,6,8,11 UL508 (Option) Specifically for Industrial Application UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking	-25 to +70	51
Minimax	MO-WI20-24S051	DC/DC	9-36	5.1	20W	Conducted EMI EN 55032 Class A & FCC Level A EMC Immunity EN 61000-4-2,3,4,5,6,8 UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking	-40 to +90	48
Panasonic	LR03AD/B	BATT		1.5		Alkaline, AAA, IEC 60086 non dangerous goods regulation	-20 to +45	52
Panasonic	CR-2025/BN	BATT		3	165mAh	Lithium, Button cell. ANSI/ESD S20.20:2014 BS EN 61340-5-1:2007 Electrostatic Control Standards	-30 to +60	52
Panasonic	CR-2032/BS	BATT		3	225mAh	Lithium, Button cell, ANSI/ESD S20.20:2014 BS EN 61340-5-1:2007 Electrostatic Control Standards	-30 to +60	52
Panasonic	LR6AD/B	BATT		1.5		Alkaline, AA, IEC 60086 non dangerous goods regulation	-20 to +45	53
Panasonic	VL-1220/HFN	BATT		3	7mAh	Lithium, Button cell with solder tags. ANSI/ESD S20.20:2014 BS EN 61340-5-1:2007 Electrostatic Control Standards	-20 to +60	53

AC/DC Power Module Series

The MINMAX AKF-15 & AQF-30 series is a range of fully encapsulated AC-DC power supply modules. The products feature EMI emission EN 55011/32 class B approved and EMS compliance to EN 61000-4 standard.

Universal input voltage 85-264VAC and International safety approvals qualifies these power modules for applications in products with worldwide markets. For industrial applications, the models for chassis mounting can also be supplied as option with UL508 approval.

The AKF-15 series provide a cost-effective solution for many space critical applications in commercial and industrial electronic equipment.



AC/DC Power Module - AKF-15 Series

Features & Benefits

- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 47-440Hz
- Single, Dual and Triple Outputs
- Protection Class II as per IEC/EN 60536
- I/O Isolation 3000VAC with Reinforced Insulation
- Operating Ambient Temp. Range -25°C to +70°C
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011/32 Class B & FCC Level B Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- UL508 Safety Approval (Option) Specifically for Industrial Application
- UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking

Part/SKU

AKF-15S12

AC/DC Power Module - AKF-30 Series

Features & Benefits

- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 47-440Hz
- Single, Dual and Triple Outputs
- Protection Class II as per IEC/EN 60536
- I/O Isolation 3000VAC with Reinforced Insulation
- Operating Ambient Temp. Range -25°C to +70°C
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011/32 Class B & FCC Level B Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- UL508 Safety Approval (Option) Specifically for Industrial Application
- UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking

Part/SKU

AQF-30S42

Minmax – DC/DC Power Module 20W

The MINMAX MOWI20 series are a range of regulated DC-DC converter modules with ultra-wide 4:1 input voltage ranges. The product comes in a fully encapsulated module with screw terminal block and is suitable for easy chassis mounting or also for DIN-Rail mounting.

Featuring an extended operating temperature range from -40°C to +90°C, EMC compliance to EN 61000-6-1 standard these modules have been designed particularly for industrial applications.

Features & Benefits

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 91%
- I/O Isolation 2500 VDC
- Operating Ambient Temp. Range -40°C to +90°C
- Under-voltage, Overload/Voltage and Short Circuit Protection
- No Min. Load Requirement
- Remote On/Off Control
- Conducted EMI EN 55032 Class A & FCC Level A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking

Part/SKU

MOWI20-24S051



Single Port PoE Indoor Midspan

The single port PoE midspan provides up to 60 Watts of power over Ethernet and offers a IEEE 802.3at-compliant solution for remote powering of devices in 48VDC environment as well as high power applications. With the midspan's plug-and-play installation, it is an easy and cost-effective addition to an existing Ethernet infrastructure while at the same time providing flexibility to assurance a future-proof scalable network.

This device is designed specifically to power IEEE 802.11n and IEEE802.3at access points, pan-tilt-zoom (PTZ) and dome cameras, IP videophones, thin clients and other high power Ethernet end-terminals. It is also backward compatible and safe to use with any 802.3af terminal such as VoIP phones, IP cameras and wireless LAN access points. It can power both existing 10/100Base-T devices and emerging wireless Gigabit devices such as WI-MAX and wireless IEEE 802.11n access points.

Features & Benefits

- Data rates: 10/100/1000 Mbps
- Power input: DC
- Compact design
- Regulatory compliance: IEEE 802.3at (PoE), RoHS compliant, WEEE compliant, CE
- EMI: FCC Part 15, Class B, EN 55022 Class B (emissions), EN 55024 (immunity)
- Safety: GS Mark Per IEC60950

Part/SKU

PD-9501G



1-Port High-Power Base T Midspan

A single port, high-power solution for remote powering of current and emerging high power applications. Generating up to 30W.

The PD-9001GR enables remote power for a new range of applications including 802.11n Access Points, an-tiltzoom (PTZ) cameras and video-phones. It can power both existing 10/100Base-T network devices and emerging wireless 1000Base-T devices such as WiMAX and wireless IEEE 802.11n access points..

Features & Benefits:

- IEEE 802.3at compliant with 2-event classification
- IEEE 802.3af backward compatible
- Output power of 30W is guaranteed
- Supports 10/100/1000Base-T applications
- Compatible with IEEE 802.3af devices
- Safe: low power devices receive only the power they need
- Automatic Detection and Protection of non-standard Ethernet terminals
- Compact design fits easily in WLAN Access Point and
- IP Cameras installations

Part/SKU

PD-9001GR/AT/AC-UK



1-Port PoH Midspan

A single-port indoor PoE injector used for remote powering of current as well as emerging high-power applications designed to power Poe compliant devices such as IEEE 802.11ax access points, Pan-Tilt-Zoom (PTZ) and dome cameras, IP videophones, thin clients and other high-power Ethernet end terminals requiring up to 90W of power and is backward compatible and safe to use with any IEEE 802.3af/at terminal such as VoIP phones, IP cameras and wireless LAN access points, powering 10/100/1000Base-T devices.

Features & Benefits

- IEEE 802.3af/at backward compatible
- Up to 90W of power over 4-pairs
- Plug-and-play installation

Part/SKU

PD-9601G/AC





MICROCHIP

PD-9500 9500 500e - 72W/Port Gigabit EEPoE Midspan Family for High Power Terminals

The PD-9500G EEPoE family is designed to power network devices such as IP cameras, access control systems, thin clients and other Ethernet powered devices (PD) that require up to 51W, while reducing power losses by almost 3W per link for 25.5W devices.

The PD-9500G series offer energy efficient PoE (EEPoE) Midspans are unique in their ability to deliver power over all 4 pairs of the Cat 5 or better cable, dissipating 50% less power than PoE Switches and 2-pair Midspans, while fully complying with the IEEE802.3at-2009 standard. EEPoE allows reduced power dissipation to new powered devices and also to the huge installed base of over 100 million existing IEEE standard compliant PDs worldwide. With the midspan's plug-and-play installation, they are easily and cost effectively implemented leveraging an existing Ethernet infrastructure while at the same time providing the assurance of a future proof network.

Features & Benefits

- Various port number availability; 6, 12, 24
- High Power over 4-pairs – 72W per port
- IEEE 802.3at Compliant with 2-event classification
- High efficiency, dissipating 50% less power than 2-pair switches and midspans
- PowerView Pro secure, remote SNMPv3 web-based management
- Supports both IPv4 and IPv6 addressing
- Cisco and legacy PoE support
- Plug-and-play installation
- Guaranteed uptime



PD-9500G

Part/SKU
PD-9500G

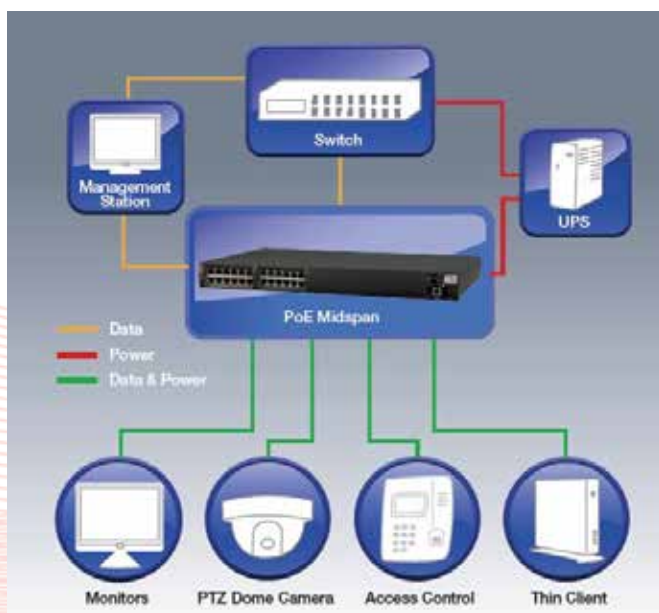


PD-9524G

24-Port 4-Pair Gigabit EEPoE Midspan with AC/DC Input (1000W)

Designed to power network devices such as IP cameras, access control systems, thin clients and other Ethernet powered devices (PD) that require up to 51W of power. It delivers power over all 4 pairs of the CAT5 (or better) cable.

This Energy Efficient PoE midspan dissipates 50% less power than conventional PoE switches and 2-pair midspans, while fully complying with the IEEE802.3at-2009 standard. It reduces power losses by almost 3W per link for 25.5W devices. The midspan's plug-and-play design simplifies installation.



Features & Benefits

- High power over 4 pairs (72W per port)
- IEEE 802.3at compliant with 2-event classification
- High efficiency, dissipating 50% less power than 2-pair switches and midspans
- PowerView Pro: Secure, remote SNMPv3 Web-based management software
- Supports both IPv4 and IPv6 addressing
- Cisco and legacy PoE support
- Plug-and-play design simplifies installation
- Guaranteed uptime

Part/SKU
PD-9524G

PDS-208 208G 208e - Fanless PoE switch for Digital Ceiling Management

Digital Ceiling is reshaping enterprises as the revolutionary PoE-based lighting system creates a new breed of smart buildings where everything is connected into a vast Internet of Things (IoT). Microsemi Digital Ceiling Switch Paves the Way for Smart Buildings with Enterprise IoT.

The Microsemi PDS-208G digital ceiling PoE switch offers an optimal and cost-effective solution for PoE lighting and other digital ceiling applications. It allows lighting fixtures and other Ethernet terminals to receive power and data over standard Ethernet cables in the most efficient way. Output PoE power can be configured per port, and the device supports full-power mode by providing 30W for eight ports simultaneously and any individual port can go up to 72W.

Features & Benefits

- 240 W of full-power PoE (IEEE 802.3at); 8 ports (30 W per port)
- Extra power per port - any individual port can go up to 72 W
- Fanless design - silent operation and enhanced reliability
- IEEE 802.3az energy-efficient-PoE 4-pair solution
- Data rates of 10/100/1000 Mbps
- Layer 2 switch - including 802.1Q-based VLANs enables segmentation of networks for improved performance and security
- Configuration and monitoring - Web management and SNMP
- Two Gigabit ports that can be used for uplinks



Part/SKU
PDS-208G

PDS-408 408G 408e

Like the PDS208G, Microsemi's PDS-408G is also a PoE switch for ceiling lighting, however this device offers 60W for all 8 ports simultaneously and any specific port can go up to 90W.

The 480W high-speed switch can be managed over Web, SSH, Telnet, CLI. It has 8 ports of 10/100/1000 Mbps (Gigabit Ethernet) with PoE BT ports, 2 Gigabit ports and one 1000M/100M SFP port.

Features & Benefits

- Digital ceiling PoE Switch : 8 PoE 10/100/1000mbps ports + 3
- Total available PoE power : 480W
- IEEE802.3bt compliant
- Supports legacy 60/90W PoE devices
- Full power of 8 x 60W - any individual port can go up to 90W
- Fanless design - enhanced reliability and silent operation
- High energy efficiency – very low power consumption in standby and in operation
- Layer 2 switch - including 802.1Q-based VLANs enables segmentation of networks for improved performance and security
- Remote management - Web and SNMP



Part/SKU
PDS-104GO

PDS-104 104G 04Ge - Outdoor PoE Managed Switch

The 4 port outdoor PoE switch provides up to 60 Watts of power over Ethernet and offers a IEEE 802.3at-compliant solution for outdoor WLANs, outdoor IP cameras, or outdoor P2P radios. With VLAN and RADIUS support, the PDS-104GO brings improved security and performance. It provides better safety through centralized management of user profiles and authorized system access. By regulating network traffic in each VLAN, the switch offers increased network performance.

The switch extends the reach between the switch and powered devices by an additional 100 meters, to a maximum of 200 meters—a major benefit in many applications. It offers lightning protection to the switch itself and to the indoor network.

Features & Benefits

- Simple & straightforward deployment - no need to open the unit during installation
- Remote Monitoring & Testing to control of the device's status
- Number of ports: 4 PoE ports + 1 SFP input port
- PoE output: 60W per port
- Data rates: 10/100/1000 Mbps
- Outdoor rated: IP66
- Integral surge protection



Part/SKU
PDS-104GO

Panasonic Industrial Powerline Alkaline AAA Battery

Alkaline industrial batteries are designed with a power reservoir that enables them to last for longer periods of time and have high current and large capacity making them perform to high standard and a longer life. With the alkaline technology, raised positive and flat negative terminals these batteries are designed for business, trade and general use.



Ideal for: Smoke detectors, Portable audio devices, Toys, High energy flashlights, Marine devices, Door lock systems, Blood pressure meters and Analogue cameras

Features & Benefits

- Heavy current and continuous drain
- Wide operating temperature range
- Low self-discharge giving them an excellent shelf life
- Non-rechargeable
- Excellent reliability and high capacity – longer life

Part/SKU
LR03AD/B

Panasonic Button Battery 3V - 20mm Diameter

CR Series Lithium coin button batteries from Panasonic are available in a variety of different sizes and capacity options to suit your application and are ideal for smaller electronic devices with a longer lasting life than alkaline equivalents.

Ideal for: Calculators, Car keys, Toys, Cameras / film equipment, Watches and Hearing aids

Features & Benefits

- Feature lithium chemistry, which has a high energy density
- Non-Rechargeable
- Wide operating temperature range
- The self-discharge on this range of coin cells is low, giving them an excellent shelf life
- Resistant to vibration, shock and acceleration
- Excellent reliability and a high capacity

Part/SKU
CR-2025/BN



Panasonic Lithium Coin Cell Battery 3V - 20mm Diameter

Non rechargeable manganese dioxide lithium coin batteries, with high energy density.

Ideal for: Power Management, Portable Devices, Consumer Electronics, Industrial and LED Lighting

Features & Benefits

- Terminals available in flat top, horizontal and vertical placement with PCB pins
- Available in 2032 standard size
- Nominal battery voltage of 3V
- Nominal capacity of 220mAh
- Continuous standard load of 0.2mA
- Operating temperature range -30°C to 60°C
- Battery weight is 2.9g

Part/SKU
CR-2032/BS



AA, Alkaline Industrial Battery



These AA 1.5V Industrial Non-rechargeable Battery feature alkaline technology with raised positive and flat negative terminals. This industrial alkaline battery is designed with a power reservoir that enables them to last longer. High current and large capacity is standard, which means high performance for the customer.

Ideal for: Portable Devices, Security, Safety and Lighting

Features & Benefits

- 0% Lead, mercury and cadmium
- $\pm 105\text{mR}$ at 1kHz Fresh impedance
- -20°C to 45°C Operating temperature range

Part/SKU

LR6AD/B

Lithium Vanadium Pentoxide Button Rechargeable Battery

Coin cell rechargeable batteries are an excellent battery to use for applications when the voltage stability is more important to you than the battery capacity.

The battery chemistry is environmentally friendly, Lithium Vanadium Pentoxide, providing a reliable power source, PCB pin, a wider range of temperature reliability, low discharge rates and amazing overcharge and plus their design is space saving.

Ideal for: Memory Back-up (RTC Circuits), Notebook, Desktop Computers, Mobile Phones, Hand Held Devices, PDA's, Office Equipment, Fax Machines and various appliances

Features & Benefits

- Lithium VL series Coin Rechargeable batteries
- Chemistry, Lithium Vanadium Pentoxide
- PCB Pin
- Voltage stability & reliability
- Low discharge rate (approx. 2% per year)
- Overcharge and over-discharge capability
- Nominal voltage 3 V | Average discharge voltage 2.85 v. | Charge voltage 3.25 to 3.55 V | Cut off voltage 2.5 V | Discharge low of 0 V
- Charge / Discharge cycle of 1000 times at 10% discharge to normal capacity
- Operating temperature -20°C to $+60^{\circ}\text{C}$

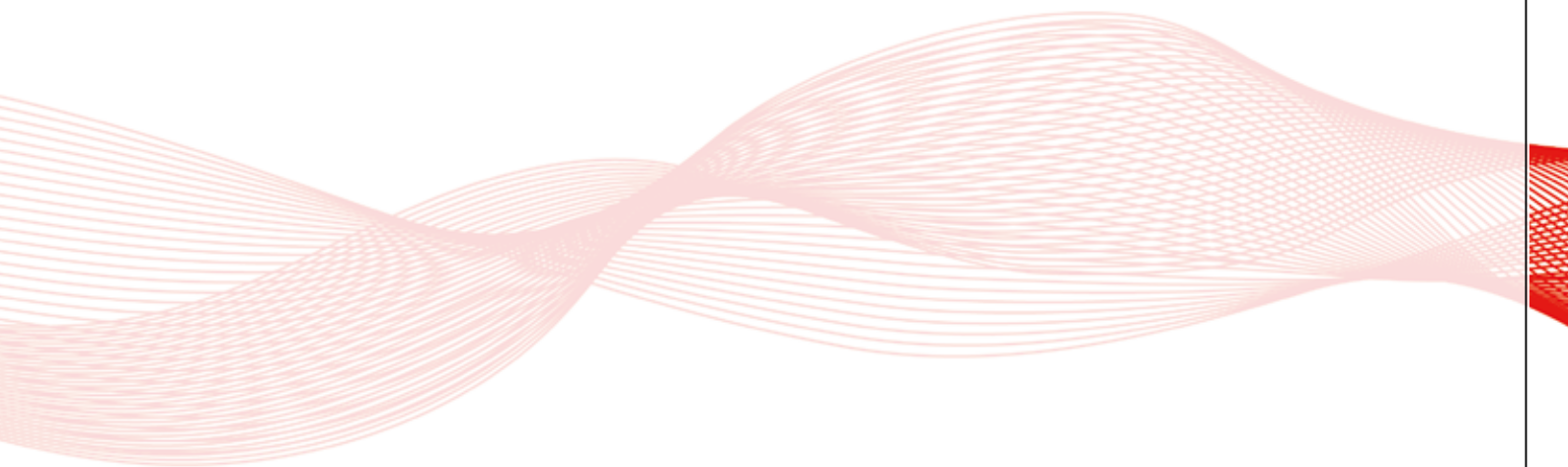
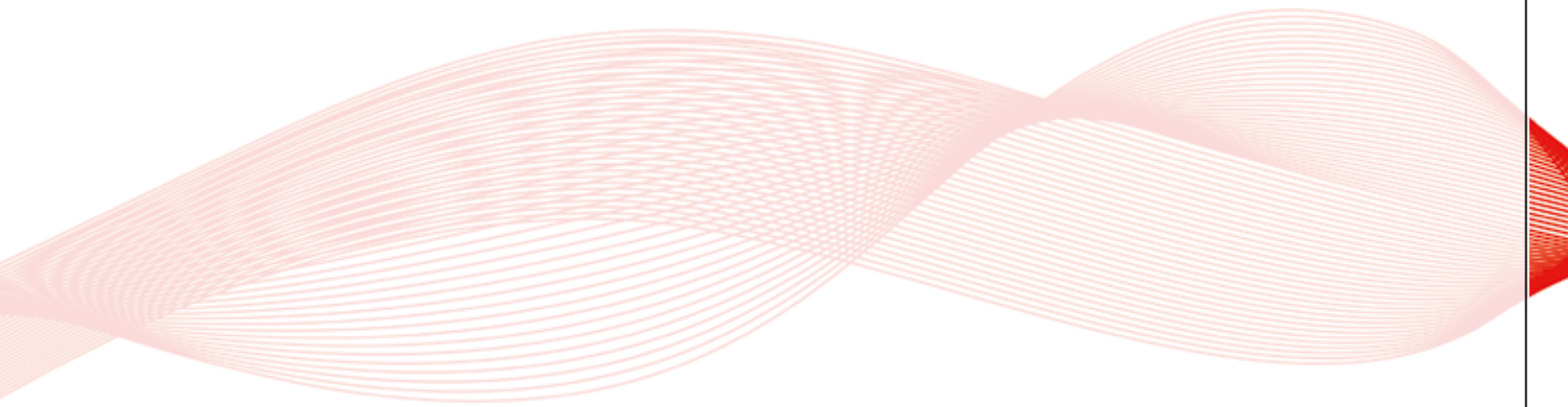
Part/SKU

VL-1220/HFN



Panasonic has been known as a leader in consumer electronic products for almost a century. They also manufacture OEM, industrial and consumer batteries, with a standard line of heavy duty, standard and high-capacity alkaline, specialty and lithium cells available.

In keeping with their reputation, Panasonic batteries are economical and reliable. Among their best-known products are their photo and hearing aid batteries.



Sensors

Manufacturer	Part/SKU	Temp/ Humidity	Motion	Contact	Harsh Environ.	Gas/ Co2	Light	Sound	Page Reference
Silicon Labs	SLTB004A	•	•			•	•	•	55
D-Link	DCH-B112			•					56
D-Link	DCH-B122		•						56
D-Link	DCS-8000LH		•				•	•	56
ADEUNIS	ARF8180BA	•							57
ADEUNIS	ARF8276A		•	•			•		57
ADEUNIS	ARF8275A	•							57
ADEUNIS	ARF8170BA-B01			•					58
ADEUNIS	ARF8283AA				•				58
ADEUNIS	ARF8230FA-B01				•	•			58
Holtek	HT7M2126		•				•		59
Holtek	HT7M2176		•				•		59
KOOLZONE	KLS-CO2					•			60
KOOLZONE	KLS-Sub200	•			•				60
KOOLZONE	KLS-Sub80	•			•				60
KOOLZONE	KLS	•							61
KOOLZONE	KLS-Plus300	•			•				61
KOOLZONE	KLS-MAG			•					61
KOOLZONE	KLS-BIN			•					62
KOOLZONE	QWANTUM	•							62

Thunderboard Sense 2 by Silicon Labs

Sensor-to-Cloud Advanced IoT Development Kit

This feature packed development platform is inclusive of a variety of sensors combined with a low power SiLabs EFR32 radio, for fast development of IoT products such as battery powered environment sensing applications. Mobile app available for download from Android & iOS stores, offering Bluetooth and cloud connectivity. Mobile app designed to demonstrate IoT capabilities.



Sensors on Board

Temp & Humidity; UV & Ambient Light; Pressure Indoor Air Quality and Gas Sensor CCS811; 6-axis Inertial Sensor ICM-20648; Digital Microphone ICS-43434; High brightness LEDs; Hall-effect Sensor Si7210

Features & Benefits

- Wireless Gecko EFR32 SoC with multi-protocol radio with ARM Cortex M4 Core
- Local Storage
- On board antenna 2.4Ghz radio configuration
- Can be used a finished product or an extension board when connected to your PCB - removes design necessity ensuring a fast to market solution for your design



Part/SKU
SLTB004A

Mini Wi-Fi HD Camera by D-Link

Compact in size yet plentiful in capability, this versatile home security camera vision boasts a 120-degree wide viewing angle and 4x digital pinch-to-zoom, with HD recording day and night.



Features & Benefits

- Instant motion/sound alerts
- Remote access
- Small in size. Dimensions; 3.5 x 3.8 x 9.2 cm
- Includes wall mounting bracket
- Simple set-up
- Compatible with Google and Alexa
- Built-in microphone

Part/SKU

DCS-8000LH

Smart Door/Window Sensor by D-Link

A discreet contact sensor that detects when a door or window is opened/ closed. This clever little device then sends a signal to your Smart Home Hub and has the capability to send a notification to your Smart Home mobile app.

Product requires a mydlink Smart Home Hub or Amazon Echo Plus1

Features & Benefits

- Works with the Google Assistant, Alexa and IFTTT
- Battery Powered
- Smart Home Compatible
- Receive Alerts from Anywhere
- Sensor Bypass Button - allows you to open doors and windows without triggering an alert
- Easy Mounting/ Installation
- Free app for easy setup
- Connects using Zigbee™ technology1



Part/SKU

DCH-B112

Smart DIY Motion Sensor by D-Link

The perfect addition to your smart home. Detects anything or anyone that moves. Connecting via Zigbee this device is compatible with, Amazon Echo Plus, Alexa and Google.

Features & Benefits

- Battery Powered
- Smart Home Compatible
- Easy wall mounting using adhesive strips.
- Mobile Alerts when motion is detected T
- Amper Detection feature for additional peace of mind
- Imaging and automations optional with HD Camera's



Part/SKU

DCH-B122

Temperature Sensor by Adeunis



A complete temperature probe, that works in conjunction with LoRa & Sigfox Technologies. Future development works also being undertaken for NB-IoT. Battery powered, no hardware design required and installed with ease.

Ideal for application areas where temperature thresholds need to be monitored for health and safety. Also suitable for building management applications.

Alerts service users where temperature thresholds have been exceeded.

Features & Benefits

- Ambient and remote temperature probes
- Local and remote configuration
- Data logging for optimal autonomy
- Redundancy for better service continuity
- Indoor temperature range: -30°C +70°C
- Replaceable battery & low power
- Dimensions: 105 x 50 x 27 mm
- Integrated fastening system: DIN rail, tube, wall mount, flange

Part/SKU
ARF8180BA

Motion Sensor by Adeunis

Pre-built motion sensor with four key functions; presence, luminosity, alert button, dry contact input.

Perfect for building management projects to monitor occupancy of rooms, comfort of delegates and monitoring energy consumption.

Features & Benefits

- Adaptable to any type of environment
- Local and remote configuration
- Data logging capability
- Battery powered/low energy device

Part/SKU
ARF8276A



Temperature & Humidity Sensor by Adeunis



Pre-built comfort temperature and humidity sensor perfect for building management projects. Tailored to ensure the comfort of occupants in any room. This battery powered device is easy to install and features remote or local configuration.

Features & Benefits

- Alert button & dry contact input
- Adaptable to any type of environment
- Data logging
- Integrated fixing system: wall or laid

Part/SKU
ARF8275A

Contact Sensor by Adeunis

Fast to market, ready to use solution this contact sensor monitors the inputs & outputs of a room.

Perfect for securing rooms and monitoring the opening and closure of an area.

Example applications include: Refrigeration; Server rooms; Confidential Record Rooms; & Equipment Safety Monitoring.

Features & Benefits

- Compact and self powered
- Cable cut tamper detection
- Replaceable battery
- Easy install

Part/SKU

ARF8170BA-B01



Delta P Sensor by Adeunis

Pre-built air pressure device suitable for monitoring the operation of ventilation units such as; ventilation boxes & filters, air handling units or air systems within buildings.

Features & Benefits

- Pressure difference: relative to the atmospheric pressure or between two different zones
- 2 digital inputs / outputs: for connecting to a PLC for tracing alerts or operating states
- 1 analogue input 0-10V: for connecting to a sensor
- Integrated fastening system : DIN rail, tube, wall, collar
- Battery operated, which can be replaced

Part/SKU

ARF8283AA



ATEX Binder Connector: Pulse Meter by Adeunis

Atex certified finished device that can be used hazardous atmospheres for communication and data logging between products.

Example applications include; gas consumption monitoring, leaks, metering, flow monitoring and dust particulate monitoring.

Features & Benefits

- ATEX product: used in explosive atmospheres such as Gas & steam
- Zone 1 : immediate proximity to the sensitive area
- Groupe IIC : hydrogen gases and vapours, acetylene ...
- Dust
- Zone 21 : immediate proximity to the sensitive area
- Solution already wired to a Binder connector
- Self-powered Emission on alert or periodic mode
- Detection of fraud and leaks
- Flow monitoring
- Locally and remotely configurable
- Data logging for optimal autonomy
- Redundancy for better service continuity

Part/SKU

ARF8230FA-B01



Holtek's new PIR module series, are specifically designed for PIR product applications and come complete with a fully integrated PIR sensor, Fresnel lens, DSP algorithms and other features.

PIR sensing is used in everyday life and can be found in applications such as; security lights, automatic doors, smart lighting systems (to conserve energy), HVAC systems, smart home and IoT products, digital signage and

Miniaturised PIR Detector Modules by Holtek

Modules in this series include; optical lenses, a passive infrared (PIR) sensor and DSP algorithms.

Application range includes: Home Security, Surveillance Systems & Basic Industrial Safety Detection.

Features & Benefits

- Low power consumption: Operating mode (Moving objects to be detected) < 1.5mA
- Standby with detecting mode < 50µA (Operating voltage 3.3V)
- Intelligent signal recognition algorithm
- Supports external optical sensors (e.g. photo transistors)
- Integrated temperature sensor with temperature compensation
- Operating temperature: -10 ~ 60°C
- Quick stabilisation: ready for stable operation within 12 seconds after power on

Part/SKU

HT7M2126



Miniaturised PIR Modules by Holtek

PIR sensors are designed to detect motion within an environment, usually used to detect whether a human has moved in or out of the sensors range.

Applications include; Security Systems, Automatic Doors, Intelligent Lighting, Garden Lights, & Guest Reception Monitors

Features & Benefits

- Small in size
- Inexpensive
- Low-power
- Easy to use and don't wear out
- Operating voltage: 2.7V ~ 5.5V
- Operating temperature: -10 ~ 60°C
- Optional communication interfaces: I2C or I/O
- Adjustable sensitivity - Network mode

Part/SKU

HT7M2176



CO2 Sensor (5-20%) by Koolzone



Out of box product designed and built to monitor CO2 levels in areas where there is relatively high gas concentration.

Built using unique patented LED technology and gold plated optics, enabling excellent power consumption, life and durability.

Features & Benefits

- Measurement range: 5-20%
- Battery powered with 1-2 years battery life
- Wireless connectivity
- Out of box solution
- Works seamlessly with Koolzone's "Monitoring as a Service" platform

Part/SKU
KLS-CO2

Smart Door/Window Sensor by D-Link

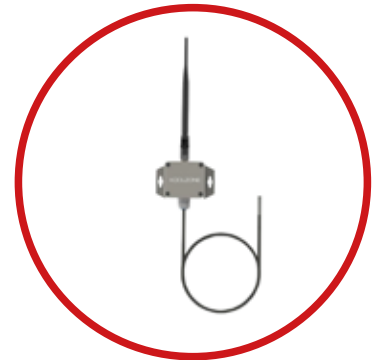
Liquid Nitrogen (Cryogenic) Sensor by Koolzone

LoRa WAN sensor built for extreme low temperature operation to -200°C. The sensor uses a platinum resistance probe allowing for greater accuracy and long term stability.

Features & Benefits

- Battery powered offering 3-7 years battery life
- Accuracy $\pm 1^\circ\text{C}$
- Out of box solution
- Radio Signal: LoRaWAN 1.0.2, certified for use in UK, Europe, USA

Part/SKU
KLS-Sub200



Sub -80 (U.L.T.) - Temperature Sensor by Koolzone



Suitable for biomedical applications, this wireless temperature sensor offers a solution in Ultra Low Temperature environments where temperature ranges are typically between -50°C & -90°C.

The platinum resistance probe ensures a better accuracy in comparison to other technologies and is offered with a range of calibration options.

Ideal for applications such as: Bio-tech & Medical freezers. or any other unit that needs to operate at Ultra Low Temperatures.

Features & Benefits

- Accuracy $\pm 1^\circ\text{C}$
- 3 - 7 Years Battery Life
- Wireless Connectivity
- Out of box solution
- Radio Signal: LoRaWAN 1.0.2, certified for use in UK, Europe, USA

Part/SKU
KLS-Sub80

Blue Sensor - Temperature & Humidity Sensor by Koolzone



This battery powered sensor works well in long range applications and offers both LoRa WAN and Bluetooth Low Energy (BLE) connectivity.

Small and compact, the out of box solution offers high RF performance with precise temperature and humidity monitoring, in normal and harsh environments.

Features & Benefits

- Temperature Accuracy 0.9°C
- Humidity Accuracy 4.5%
- 3-7 Years Battery Life - which are replaceable
- Wireless Connection
- Out-of-the-box solution
- 256k of flash memory available
- Integrated custom laird antenna for 868 or 915MHz ceramic chip antenna for 2.4GHz

Part/SKU
KLS-BLUE

Oven Temperature Sensor by Koolzone

LoRaWAN sensor ideal for high temperature operation at +300°C. The platinum resistance probe provides increased accuracy and long term stability in comparison to other products on the market.

Offered with a range of calibration options to suit different applications such as; curing ovens or other systems that need to operate at temperatures above 100°C and below 350°C.

Features & Benefits

- High Temperature Monitoring
- Accuracy $\pm 2^{\circ}\text{C}$
- 3-7 Years Battery Life
- Wireless Connection
- Out-of-the-box solution
- LoRaWAN 1.0.2, certified for use in UK, Europe, USA and other countries
- Free space wireless distance range up to 20Km

Part/SKU
KLS-Plus300



Door Sensor by Koolzone

Using a magnet and a switch with terminals to connect the signal wires to the transmitter this sensor allows users check whether a door is open or closed. This can be done remotely via web interface or notification alarms.

Ideal for applications where it is imperative for doors to remain closed or should only remain open for short periods of time such as; security doors & refrigeration. The magnet mounts to a door, drawer or access panel, while the switch mounts to the surrounding frame.

Features & Benefits

- Open/ Close sensing technology
- 3-7 years of battery life
- Operating distance 1cm
- Wireless connectivity
- Pre-built solution
- Standard cable length 15 cm (longer cables are available on request)

Part/SKU
KLS-MAG



Bin Sensor by Koolzone



Koolzone's bin sensor was designed to monitor volume levels with the additional features for fire detection and angle of mounting.

Ideal for industrial disposal companies, where data can be collated in order to effectively manage emptying schedules and provide logistical cost savings and reduce environmental impacts.

The device works alongside pre-built software "KoolZone Monitoring Platform".

Features & Benefits

- 3mm accurate detection distance
- 3-5 years battery life
- Wireless Connection
- Out-of-the-box solution
- LoRaWAN - EU868/US915/AS923MHz
- STM32, 32bit ARM core controller

Part/SKU

KLS-BIN

Qwantum - Wireless LoRaWAN Temperature Sensor by Koolzone

This sensor is a long range battery powered device featuring integrated sensors to measure temperature and humidity, whilst incorporating LoRa WAN connectivity.

The device provides intelligent wireless data monitoring via the "Koolzone Monitoring Platform" which runs on iOS or Android phone, iPad, tablet or laptop. Alert notifications can be sent by text, email, or phone.

Ideal applications include: Healthcare, Life Sciences, Agricultural, Food Retail and Food Manufacturing.

Features & Benefits

- Temperature accuracy $\pm 0.2^{\circ}\text{C}$
- Waterproof - IP65
- Up to 7yrs of battery life
- Wireless Connection
- Out-of-the-box solution
- Dimensions: 72 x 72 x 29 mm
- 32 bit ARM CPU
- Integrated antennas

Part/SKU

QWANTUM



LoRa Technology

LoRa Technology & the recognised LoRaWAN protocol, are widely used in IoT applications to enable connectivity and data collation/ reporting, from various technologies.

Using licence-free sub gigahertz radio frequency bands, LoRa Technology is ideal for devices that require low power consumption and connectivity over a wide area network or long range transmission (up to 10km in some instances).

Typical applications using LoRa Technology include; energy management, smart home applications, pollution control, environment monitoring smart city applications, agriculture, logistics management and smart metering.

Services



Digi Remote Manager (DRM)

Digi's DRM Software offers secure monitoring and control of distributed IoT devices, inclusive of over air upgrades and problem diagnosis within a network.

DRM offers compatibility with virtually any cloud / analytics platform enabling fast deployment and management of your network application.

Features & Benefits

- Industry-leading cloud and edge tools for rapid device deployment and easier asset and inventory management
- Monitor network, device and asset performance and security with bi-directional communications
- Access data from edge devices that were previously out of reach and define precisely where you want the business logic
- Automate mass firmware and software updates to stay in compliance
- Integrate device data through open APIs to gain deeper insights
- Receive detailed reports and real-time alerts on network health and device conditions

Robustel Cloud Manager Service

Robustel Cloud Manager Service (RCMS) is a modular IoT cloud software platform compatible with all Robustel products.

RCMS is designed from the ground-up to empower Robustel customers to build their IoT Solution(s) in a manner that is scalable, cost effective and can evolve quickly with the market.

Designed to work hand-in-hand with RobustOS, RCMS unlocks the true potential of Robustel products giving customers the ultimate range of monitoring, management and control functions.

With it's modular design RCMS enables new APPs to be added to the platform without interfering with core behaviour, to create new functionality and allow for integration with third-party software.

Packages: RCMS Basic; RCMS Essentials; & RCMA Advanced

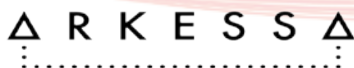


Arkessa M2M Management Service Provider

Arkessa is a leading M2M managed services provider, delivering connectivity services and solutions through an unrivalled multi-network capability spanning all regions of the world.

Features & Benefits

- Global Connectivity, any Network Cellular, Satellite and LPWA
- Connecting Enterprises of all Scales
- Best in Class Support
- Future Proof Connectivity
- Exceptional Partner Eco-System



Koolzone Monitoring-as-a-Service



KOOLZONE

Generate on-line reports and charts for up-to-the minute intelligence on how assets are behaving to improve efficiency and reduce costs. Optimising set points and highlighting maintenance issues will reduce operating costs and energy bills.

For example, a sub-operational fridge or freezer might consume up to 100% more electricity than a well-maintained unit.

Auto-generated, error-free, legally compliant reports save time and money and document issues using intuitive menus.

Features & Benefits

Reports:

- Auto-generated legally compliant reports
- Selection criteria
- Pre-formatted templates
- Download or print

Charts:

- Time-based charts; Every data point displayed; Machine learning; Predictive maintenance

InVMA Asset Minder

Manage all of your assets in one easy to use application with predictive analytics capabilities.

This out-of-the-box solution can be easily implemented into your current business processes to increase productivity throughout your entire enterprise.

Features & Benefits

- Connect any and all assets to monitor equipment or devices, allowing you to unlock levels of efficiency that haven't been possible before.
- Predictive analytics capabilities analyse data to assess current and past behaviours to forecast future outcomes and help make decisions or automate processes.
- Seamlessly integrates with your current enterprise systems, therefore it is easily scalable across your whole organisation
- Add multiple users
- Fast implementation - Asset Minder captures data from through industrial grade Bluetooth sensors and robust Dell gateways
- Pre-configured, customisable, interface that enables easy importing and analysis of data



InVMA

Sim Cards



Solid State Supplies can offer a range of airtime SIM product solutions, tailored for IoT deployments, including 4G, LTE, 5G, NB-IoT. Each can be scaled and configured within its fundamental operational parameters.

Sim management software is available upon request in fulfill customer requirements to effectively, efficiently and secure manage the connectivity of their dispersed mobile and/or static IoT devices.

Features & Benefits

- Global sims
- Regional roaming
- Multi-network sims
- Sim management platforms and portals

Storage

Manufacturer	Part/SKU	Format/Interface	Max Capacity	Max R/W Speed	Nand Flash Type	R/W Cycles	Temp	Page Reference
Innopeta	ST500 1TB	SSD/SATA 3.0	1TB	Read - 520MB/sec Write - 515MB/sec	MLC/TLC	1,200,000	Commercial	69
Innopeta	MS500 46X 256GB	SSD/SATA 3.0	256GB	Read - 480MB/sec Write - 280MB/sec	MLC/TLC	1,000,000	Commercial	69
Innopeta	NF500 2242 512GB	SSD/SATA 3.0	512GB	Read - 500MB/sec Write - 400MB/sec	MLC	1,200,000	Commercial	70
Transcend	TS2GUSDC	SD Card	2GB	Write - 10MB/sec	Class 1/ MLC	10,000	Industrial	65
Transcend	TS4GUSDHC10	SD Card	32GB	Write - 10MB/sec	Class 10/ MLC	10,000	Industrial	66
Transcend	TS16GUSDHC10	SD Card	16GB	Read - 90MB/sec Write - 10MB/sec	Class 10/ MLC	10,000	Industrial	67
Transcend	TS2GSDC	SD Card	2GB	Write - 10MB/sec	Class 1/ MLC	10,000	Industrial	66
Transcend	TS8GUSDHC10	SD Card	32GB	Read - 30MB/sec Write - 10MB/sec	Class 10/ MLC	10,000	Industrial	66
Transcend	TS512GMTE452T	SSD/PCIe	512GB	Read - 1700MB/sec Write - 1250MB/sec	TLC	3,000,000	Com /Ind	67
Transcend	TS1TSSD420K	SSD/Hard Drive	1TB	Read - 560MB/sec Write - 460MB/sec	MLC	1,500,000	Commercial	68
Transcend	TS2TMTS952T	SSD/SATA 3.0	2TB	Read - 560MB/sec Write - 520MB/sec	TLC	3,000,000	Com/Ind	68



Flash Memory Card

2GB microSD standard memory card.

Ideal for mobile phones, eBooks, tablet PCs or portable gaming consoles, to increase the amount of storage space for your device.

Features & Benefits

- Compact size in comparison to standard SD cards, without affecting features and performance
- Easy to use, plug and play operation
- Complies with secure digital music initiative (SDMI) portable device requirements
- Supports content protection for recordable media (CPRM)
- Supports auto standby, power off and sleep modes
- Operating voltage range from 2.7V to 3.6V

Part/SKU
TS2GUSDC



MicroSDHC Flash Memory Card

Easily extend storage capacity on mobile devices such as digital cameras, tablets, mobile phones, eBooks and gaming consoles.

Available in various sizes: 4GB, 8GB, 16GB and 32GB

Features & Benefits

- Operating temperature range of -25°C to +85°C
- With a built-in ECC (Error Correcting Code), these Micro SDHC cards are able to identify and correct issues with transfers
- Transcend RecoverX software: can easily be downloaded onto your computer and allows you to search for files that may have been deleted that can be recovered
- Dimensions: 11 mm x 15 mm x 1 mm

Part/SKU

TS4GUSDHC10



MicroSDHC, Flash Memory Card - Class 10, 8GB

Class 10 premium flash memory card with 8GB storage.

With technology constantly evolving, most mobile devices require fast and powerful memory capability in order to run advanced applications and HD imaging/ recording.

Also available in 16GB storage capacity - P/N TS16GUSDHC10

Features & Benefits

- Fast and reliable read/ write performance
- Plug-and-play
- Supports auto standby, power off and sleep modes
- Mechanical write protection switch
- Compliant with the SD 3.0 standard

Part/SKU

TS8GUSDHC10



2GB Flash Memory Card

2GB digital flash memory card, which is secure and cost effective.

It is specifically designed to meet the security, capacity and small form factor (24mm x 32mm x 2.1mm) requirements in newly emerging audio and video consumer electronic devices.

Features & Benefits

- ROHS compliant product
- Operating Voltage: 2.7 ~ 3.6V
- Operating Temperature: -25 ~ 85°C
- Insertion/removal durability: 10,000 cycles
- Fully compatible with SD card spec. v1.1
- Mechanical Write Protection Switch
- Forward compatibility to Multimedia Card Version 2.11
- Supports Copy Protection for Recorded Media(CPRM) for music and other commercial media

Part/SKU

TS2GSDC



SDHC10 Card 16GB

Transcend High Capacity SD Card series are specifically designed to meet the High Capacity, High Definition Audio and Video requirement for the latest Digital Cameras, DV Recorders, GPS, etc. The new defined Speed Class 10 enables the host to support AV applications to perform real time recording to the SD memory card.

Also available in 32GB storage capacity. P/N - TS32GSDHC10



Features & Benefits

- RoHS compliant product.
- Card Lid material: PC + ABS
- Operating Voltage: 2.7 ~ 3.6V
- Operating Temperature: -25 ~ 85°C
- Durability: 10,000 insertion/removal cycles
- Compatible with SD Specification Ver. 3.0
- Mechanical Write Protection Switch
- Supports Speed Class Specification up to Class 10
- Supports Copy Protection for Recorded Media (CPRM) for SD-Audio
- Form Factor: 24mm x 32mm x 2.1mm

Part/SKU

TS16GSDHC10

PCIe M.2 SSDs

Transcend's MTE452T M.2 SSD features the PCI Express (PCIe) Gen 3 x2 interface and is compatible with NVM Express (NVMe) 1.3 specifications to achieve never-before-seen transfer speeds.

The MTE452T features state-of-the-art 3D NAND technology, which allows 96 layers of 3D NAND flash chips to be vertically stacked. Compared to 3D NAND at 64 layers, this density breakthrough greatly improves storage efficiency. The MTE452T is built with DRAM cache for fast access, and is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles.

Transcend also offers the MTE452T-I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.

Features & Benefits

- DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Wide-temperature model available
 - Promised operational reliability in a wide temperature range from -40°C to 85°C
- Key components fortified with baked-in Corner Bond process
- Compliant with PCI Express specification 3.1
- Supports NVM command
- SLC caching technology
- Built-in LDPC ECC (Error Correction Code) functionality
- Dynamic thermal throttling
- Compliant with RoHS 2.0 standards
- Supports Transcend SSD Scope Pro software

Part/SKU

TS512GMTE452T



2.5" SATA SSDs

Featuring the SATA III 6Gb/s interface, a powerful controller, and top-tier MLC NAND flash chips, Transcend's SSD420K ensures impeccable performance as well as reliability.

Transcend also offers the SSD420I with wide temperature (-40°C ~ 85°C) capabilities to ensure sustained functionality, enhanced endurance and optimal reliability in mission-critical applications.



Features & Benefits

- Wide-temperature model available
 - Promised operational reliability in a wide temperature range from -40°C to 85°C
- Advanced Global Wear-Levelling and Block management for reliability
- Advanced Garbage Collection
- DRAM Cache embedded
- Built-in ECC (Error Correction Code) functionality
- Power-saving DevSleep (Device Sleep) mode
- Enhanced S.M.A.R.T. function for durability
- Compliant with RoHS 2.0 standards
- SSD420K-SE is compliant with TCG Opal specifications

Part/SKU

TS1TSSD420K

SATA III M.2 SSDs

Transcend's MTS952T M.2 SSD features the SATA III 6Gb/s interface and state-of-the-art 3D NAND technology, which allows 96 layers of 3D NAND flash chips to be vertically stacked.

Compared to BiCS3 NAND at 64 layers, this density breakthrough greatly improves storage efficiency. The MTS952T is built with DRAM cache for fast access, and is fully tested in-house to guarantee reliability in mission-critical applications, boasting an endurance rating of 3K Program/Erase cycles.

Features & Benefits

- DRAM Cache embedded
- Space-saving M.2 form factor (80mm) – ideal for mobile computing devices
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Advanced Global Wear-Levelling and Block management for reliability
- Advanced Garbage Collection
- Built-in LDPC ECC (Error Correction Code) functionality
- Enhanced S.M.A.R.T. function for durability
- Compliant with RoHS 2.0 standards
- Supports Trim and NCQ command
- Power-saving DevSleep (Device Sleep) mode (optional)



Part/SKU

TS512GMTE452T

Wolf Series 2.5" SSD

The Innova Wolf series solid state drive is manufactured with high-speed read and write performance and stable quality, greatly improving the start-up speed of the computer. Significantly reducing the response time of the operating system and applications, no mechanical moving parts, no noise, shock and impact resistance.

Ideal for upgrades of personal computers, desktops, notebooks, ultrabooks and other hard drives.

Features & Benefits

- High performance: SATA3.0 (6Gbps)
- Power-off protection: After sudden power failure, data can be automatically recovered
- Low power consumption: maximum power consumption is only 2W
- Zero noise: due to solid state drive Mechanical movement, so keep silent during work
- Support Trim, ECC, SMART

Variants Available

- 128GB – up to 490MB/sec read and 480MB/sec write
- 256GB – up to 510MB/sec read and 490MB/sec write
- 512GB – up to 520MB/sec read and 500MB/sec write
- 1TB – up to 520MB/sec read and 515MB/sec write

Part/SKU

ST500 128GB



mSATA Solid State Drive

These drives are made from Intel MLC original particles, and offer stable data transmission. Highly reliable and an excellent choice for industry users.

Ideal for: upgrades of personal computers, desktops, notebooks, ultrabooks and other hard drives

Features & Benefits

- High performance: SATA3.0 (6Gbps)
- Power-off protection: After sudden power failure, data can be automatically recovered
- Low power consumption: maximum power consumption is only 2W
- Zero noise: due to solid state drive Mechanical movement, so keep silent during work
- Support Trim, ECC, SMART

Variants Available

- 64GB – up to 280MB/sec read and 70MB/sec write
- 128GB – up to 480MB/sec read and 140MB/sec write
- 256GB – up to 480MB/sec read and 280MB/sec write

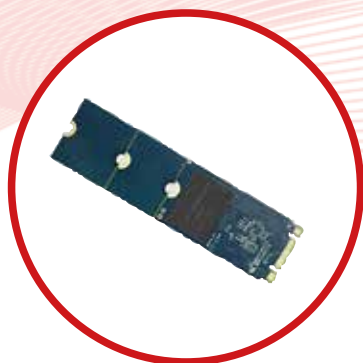
Part/SKU

MS500 46X 128GB



M.2 Solid State Drive

M.2 connector, multi-purpose, available in sizes 2242, 2260 and 2280. The product is made with Intel MLC original particles. Stable and durable and a great choice for computer upgrading.



Features & Benefits

- High performance: SATA3.0 (6Gbps)
- Power-off protection: After sudden power failure, data can be automatically recovered
- Low power consumption: maximum power consumption is only 2W
- Zero noise: due to solid state drive Mechanical movement, so keep silent during work
- Support Trim, ECC, SMART

Part/SKU

NF500 2242 256GB

Accessories

Manufacturer	Part/SKU	Antenna	Fan	Cable	PoE	NFC	Charging & Docking	Straps & Brackets	Cases	Summary	Page Reference
Aaeon	RDS-241V						•			Docking Station	72
Aaeon	RDS-411						•			Docking Station	72
Aaeon	RTC-1200BKT01-000							•		Bracket	72
Aaeon	RTC-1010-VMP-000							•		Mount Plate	72
Aaeon	RTC-1200SPC01-000								•	Protective Case	72
Aaeon	RTC-1200HSP01-000							•		Strap	73
Aaeon	RTC-1200BLT02-000							•		Shoulder Belt	73
Aaeon	RTC-1200BLT01-000							•		Shoulder Belt	73
Aaeon	RTC-1010-SB-000							•		Shoulder Belt	73
Aaeon	RBC-1200-000						•			Battery Charger	73
Aaeon	RTC-1200BAT01-000						•			Battery Pack	73
Aaeon	1255900363						•			Power Adapter	73
Aaeon	1255900364						•			Power Adapter	73
Digi	JF1R6-CR3-4I			•						Adapter	75
EAD	WMO86916					•					75
Knight	OA4715-23TB		•							AC Fan	76
Knight	OD6025-24HB		•							DC Fan	76
Knight	OA109AP-22-1TB		•							AC Fan	76
Knight	OD4010-24HB(01A)		•							Tubeaxial Fan	77
Knight	OD6015-24MB		•							DC Fan	77
Microchip	PD-POE-EXTENDER				•					Extender	78
Microchip	PD-AS-951/12-24				•					Power Splitter	78
TechNexion	CLIX-NFC-PN7150					•				PN7150 NFC solution	77
2J	2JW1024	•								G LTE with 2G, 3G fallback	74
2J	2J5424P	•								4G LTE Antenna with 2G, 3G fallback	74
2J	2JF0624P	•								4GLTE / FirstNet / LPWA / NB-IoT/ Cat-X-Mx-NBx / 3G / 2G	74
2J	2J0202-C75G	•								2.4-5.0GHz / WiFi / Sigfox / LoRa / LPWA / BT / ZigBee / RFID / ISM	74
2J	2J0202-C638	•								2.4-5.0GHz / WiFi / Sigfox / LoRa / LPWA / BT / ZigBee / RFID / ISM	75
2J	2J3683M	•								5G, 4G LTE, 3G & 2G fallback	75
2J	2JW0183	•								5G, 4G LT, 3G & 2G fallback	75

Docking Stations for Aaeon's Rugged Tablet Range

Compact in size yet plentiful in capability, this versatile home security camera vision boasts a 120-degree wide viewing angle and 4x digital pinch-to-zoom, with HD recording day and night.

Rugged Docking Station for RTC-1200

Features & Benefits

- Apply on RTC-1200
- Anti-theft Lock with Key & VESA mount
- Downward-facing I/Os for Easy Cable Management
- Ext. GPS and WWAN with SMA Connector
- Front-facing I/O: USB x 2 in landscape Side
- Downward-facing I/Os: USB 3.2 Gen 1 Dual Port x 1 + RS-232 x 2, One with 5V in Pin9 & the Other with GPIO x 8, GbE x 1, M12 DC-in x 1
- Wide Voltage Range: 9V DC ~ 36V DC in M12-5P Female Connector
- Adaptor is Additionally: (Car Adaptor with Cigarette Plug or Std Adaptor for YC-14)



Part/SKU

RDS-241V

Rugged Docking Station for RTC-1200

Features & Benefits

- Apply on RTC-1010/RTC-1010M
- Front-facing I/Os: USB 2.0 x 2 with Protection Cover
- Downward-facing I/Os for Easy Cable Management: USB 2.0 x 2, RS-232 x 1 (Two: Optional), RJ45 GbE x 1, DC-in Phoenix Connector x 1
- Wide Voltage Input: 9VDC ~ 36VDC
- Power Adaptor: AC Power Adaptor (Default)
- Anti-theft Lock with Key & VESA Mount



Part/SKU

RDS-411



Mount Brackets & Cases for Aaeon's Rugged Tablet Range

Quickly turn the RTC-1200 into a wall-mounted panel PC replacement with this rugged VESA mount, designed with a quick release mechanism so the mount can stay in place while still maintaining tablet mobility.

VESA Mount Bracket for RTC-1200

Features & Benefits

COLOUR: Black DIMENSIONS: (W x D x H)- 180 x 203.3 x 45.4 mm

Part/SKU

RTC-1200BKT01-000



VESA Mount Plate for RTC-1010M

Features & Benefits

COLOUR: Black DIMENSIONS: (W x D x H)- 275.6 x 191.7 x 25 mm

Part/SKU

RTC-1010-VMP-000



2-in-1 Protective Case for RTC-1200

Features & Benefits

COLOUR: Black DIMENSIONS: (W x D x H) - 310.3 x 204 x 36.5 mm

Part/SKU

RTC-1200SPC01-000

Mount Brackets & Cases for Aaeon's Rugged Tablet Range

Hand Strap for RTC-1200

COLOUR: Black

DIMENSIONS: (W x D x H) - 260 x 92 x 30 mm

Part/SKU

RTC-1200HSP01-000

Shoulder Belt for RTC-1200

COLOUR: Black

DIMENSIONS: (W x D x H) - 450 x 350 x 50 mm

Part/SKU

RTC-1200BLT02-000

Shoulder Belt for RTC-1200

COLOUR: Black

DIMENSIONS: (W x D x H) - 1050 x 65 x 5 mm

Part/SKU

RTC-1200BLT01-000

Shoulder Belt for RTC-1010/RTC-1010M

COLOUR: Black

DIMENSIONS : (W x D x H) - 1050 x 65 x 5 mm

Part/SKU

RTC-1010-SB-000



Chargers for Aaeon's Rugged Tablet Range

4-bay Battery Charger for RTC-1010/RTC-1010M, RTC-1200

COLOUR: Black

DIMENSIONS: 140.5 x 68.4 x 121.87 mm

Part/SKU

RBC-1200-000

Battery Pack for RTC-1010/RTC-1010M, RTC-1200

COLOUR: Black

DIMENSIONS: 71.5 x 110 x 13.3 mm

Part/SKU

RTC-1200BAT01-000

DC-To-DC Power Adapter, Flying Wires for RTC-1010/RTC-1010M

COLOUR: Black

DIMENSIONS: Adapter case: 40 x 105 x 26.5 mm

Flying Wires side length: 600 ± 30 mm

Plug side length 1200 ± 30 mm

Total length: 1905 ± 60 mm

Part/SKU

1255900363

2-in-1 Protective Case for RTC-1200

COLOUR: Black

DIMENSIONS: Adapter case: 40 x 105 x 26.5 mm

Flying Wires side length: 600 ± 30 mm

Plug side length 1200 ± 30 mm

Total length: 1905 ± 60 mm

Part/SKU

1255900364



4G LTE/3G/2G Low Profile High Efficiency Antenna

Wide band High Efficiency connector mount antenna solution for worldwide 4G LTE with 2G, 3G fallback compatibility, covering all cellular bands ranging from 698-960, 1710-2170 and 2500-2700 MHz.



Omni-directional properties gives the antenna consistent and stable connectivity with high throughput data to access points, routers, small base station, femto cells, repeaters, boosters, fleet management devices and other telematics devices with cellular needs. The antenna can freely swivel 360 degrees and features a hinged connector up to 90 degrees, having flexibility in orientation with respect to the device for easier installation or multiple antenna mounting.

Features & Benefits

- Also available in 868Mhz
- Connector mount - for easy installation.
- Low profile

Part/SKU

2JW1024

Ultra Wide Band Customisable Adhesive Antenna

4G LTE Antenna with 2G, 3G fallback: this Antenna features customisable options to better suit your intended application.

Features & Benefits

- Dimensions: 112.5 x 60 x 11.3mm
- Operating temperature: -40 °C to +85 °C
- Adhesive mount
- Customisable cable and connector

Part/SKU

2J5424P



Slimline Flexible PCB Antenna

Flexible antenna with adhesive mount, which supports the following frequencies: 4GLTE/FirstNet/LPWA/NB-IoT/Cat-X-Mx-NBx/3G/2G.



Features & Benefits

- Embedded Antenna
- Operating temperature: -40 °C to +85 °C
- Customisable cable and connector
- Self adhesive
- Ground plane independent
- Flexible for easy of assembly

Part/SKU

2JF0624P

Dual Band Wi-Fi ISM Antenna

Compact ISM antenna suitable for the following frequencies: 2.4-5.0GHz/WiFi/Sigfox/LoRa/LPWA/BT/ZigBee/RFID/ISM

Features & Benefits

- Small form factor - 12.5 x 34.7mm
- Connector mount built into the product for easy installation
- Supports multiple frequencies
- High gain
- Ground plane dependent
- Operating temperature: -40 °C to +85 °C

Part/SKU

2J0202-C75G





Dual Band Wi-Fi ISM Antenna

Perfect for applications requiring Wi-Fi or telematics signalling. This dual band antenna is compact, with linear polarisation and an omni-directional radiation pattern.

Frequencies suited are: 2.4-5.0GHz/WiFi/Sigfox/LoRa/LPWA/BT/ZigBee/RFID/ISM

Features & Benefits

- Dimensions: 12.5 × 44.5
- Operating temperature: -40°C to +85°C
- Connector Mount
- High gain
- Ground plane dependant

Part/SKU

2J0202-C638

5G Magnetic Mount Antenna

Ultra wide band, magnetic mount antenna with 4G LTE, 3G & 2G fallback. Ideal for telematic and LTE applications this product offers high performance and customisable options to better suit your application.

Features & Benefits

- Dimensions: 31 × 109mm
- Operating Temperature: -40°C to +85°C
- Customisable cable and connector
- Ground plane dependant

Part/SKU

2J3683M



5G NR Antenna

Highly efficient 5G Antenna with hinged connector for easy positioning. Available in black or white to better suit your application. This antenna also has 4G LT, 3G & 2G fallback.

Features & Benefits

- Dimensions: 171 × 38 × 13.8
- Operating Temperature: -40 °C to +85 °C
- High Performance
- Connector Mount
- Hinged Connector

Part/SKU

2JW0183



Cable - U.FL Female to RPSMA Female 4"

Adapter cable for connecting U.FL to RPSMA

Features & Benefits

- End A: RP-SMA Female Jack, Male Pin; End B: Ultra Miniature
- Coaxial Plug, Female Socket, Right Angle

Part/SKU

JF1R6-CR3-4I



High Gain Outdoor Omni Antenna

Designed specifically for outdoor wall mount applications this high gain antenna is suitable for 868MHz & 915MHz frequencies. Ideal for product developments using LoRa, Sigfox and LPWAN and offers a gain of up to 6 dBi on both bands and boasts superior RF performance quality whilst having an overall length of less than 85cm.

Features & Benefits

- 5M white loss cable and SMA-Male as standard
 - Robust reversible L-bracket to enable flexible mounting options
- Housed in a durable fibreglass tube for product longevity

Part/SKU

WMO86916





AC Axial Fan

Competitively priced and high in quality, these AC Fans are offered as a ball bearing or sleeve bearing option. The standard air flow is 110 CFM. It's offered in 120 and 230 standard volts. All models can be customised if needed to fit your voltage requirements.



Features & Benefits

- AC Fan 230 V 120 x 38mm
- Frame: Diecast Aluminium
- Impeller: PBT, UL94V-0 plastic
- Nominal Voltage: 230 VAC
- Nominal Current: 0.20 A
- Rated Power: 24 W (60Hz)
- Rated Speed (RPM): 3000
- Noise Level (dB): 44
- Max. Static Pressure: 0.37" H2O
- Operating Temperature: Ball Bearing (Dual Ball bearing system) -10°C ~ +70°C
Storage Temp: -20°C ~ +80°C

Part/SKU

OA4715-23TB

DC Axial Fan

DC Fan measuring 60 x 25mm with dual ball bearing and lead wires. This fan has a PBT Thermoplastic casing and can be mounted in a horizontal and vertical position. Features curved blades which allow for smooth and efficient air flow and low noise levels.

Features & Benefits

- Tubeaxial Fan
- Air Flow: 24.0 CFM (0.672m³/min)
- Static Pressure :0.200 in H2O (49.8 Pa)
- Ball Bearing
- Noise: 35.0dB
- Power (Watts): 3.5W
- RPM: 4500 RPM
- Termination: 2 Wire Leads
- Op Temp: -20 ~ 75°C

Part/SKU

OD6025-24HB



AC Axial Fan

Built in a robust die-cast aluminium frame this fan is ideal for industrial applications. Featuring a dual ball double sealed bearing system or sleeve bearing, this product offers an excellent performance. Life expectancy give approximately 60000 hours based on L10 curve figures, whilst allowing smooth and efficient air flow.



Features & Benefits

- Impeller: PBT, UL94V-0 plastic
- Connection: 2x 300mm Lead wires (22AWG) or terminals
- Motor: AC shaded pole, impedance protected
- Insulation Resistance: >100M ohm between lead wire and frame (500VDC)
- Dielectric Strength: 1 min at 1500 VAC, 50/60Hz
- Speed (RPM): 3000
- Airflow (CFM): 110
- Noise (dB): 42
- Volts AC: 230
- Voltage Range: 160~260
- Watts: 15
- Max. Static Pressure ("H2O): .28

Part/SKU

OA109AP-22-1TB



Tubeaxial Fan

Tubeaxial DC Fan offered with either a ball bearing or sleeve bearing. Typical voltage is 24V, however, voltage customisation is available to better suit your application needs.

Other customisable options offered include: Tachometer, Alarm & PWM.



Features & Benefits

- Dimensions: 40x40mm
- Fan Type: Tubeaxial
- Voltage: 24VDC
- Size : 40x40mm
- Operating Temperature: -20 ~ 80°C
- Air Flow Rate: 7.0 CFM
- Static Pressure : 0.100 in H2O
- Noise: 25.0dB
- RPM: 6000 RPM
- Termination : 3 Wire Leads

Part/SKU

OD4010-24HB(01A)

Tubeaxial Fan

24V DC FAN, 60 x 15mm in dimension, featuring customisable frame & impeller options as follows: PBT, UL94V-0 plastic Available Options: Tachometer (FG), Alarm (RD).

Features & Benefits

- Other frame styles available: Sleeve Bearing
- Life Expectancy (L10): Ball Bearing and 60,000 hours (L10 at 40C)
- Operating Temperature -10C ~ 70C
- Weight: ~ 0.08 lbs
- Connection: 2x Lead wires
- Storage Temperature -40C ~ +80C
- Motor: Brushless DC, auto restart, polarity protected

Part / SKU

Part/SKU

OD6015-24MB



Clix Module - Near Field Communication with Antenna

Complete solution ready to use featuring NXP's PN7150 NFC solution. Which fully comply with the NFC Forum, including Linux®, Android, and WinIoT drivers and support NCI 1.0 host communication, for easy integration into any OS / contactless environment.



Features & Benefits

- Perfect for applications such as; contactless payment systems, smart cards, electronic ticketing and wireless fob controls.
- Plug-and-play NFC solution for fast deployment.
- Antenna included

Part/SKU

CLIX-NFC-PN7150

PoE Extender

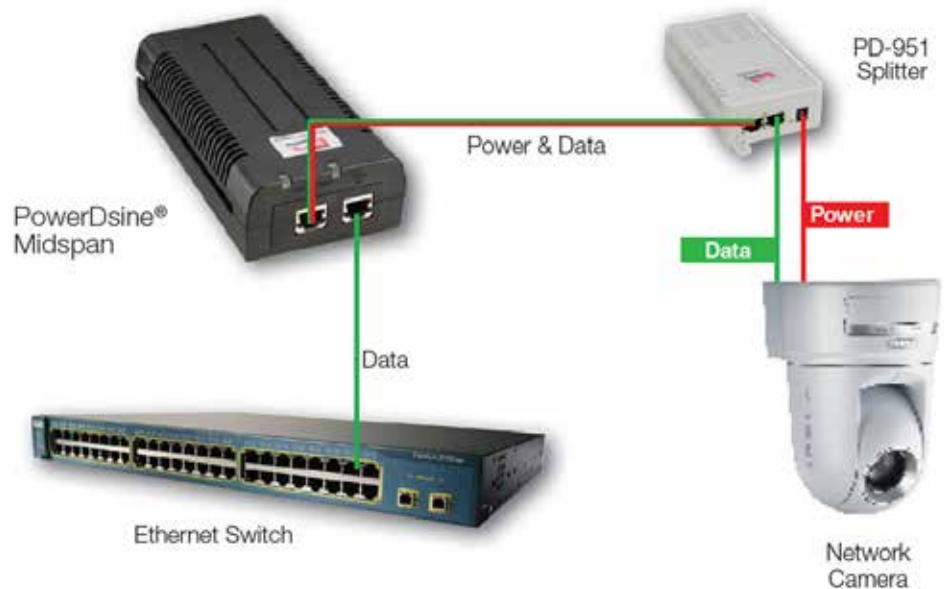
Microsemi's PoE Extender enables an extension of over 100mtrs on a typical Power over Ethernet Installation. A cost effective solution delivering both data and power to network devices such as WLAN Access Points and Network Cameras up to a distance of 200m while complying with IEEE PoE and Data standards.

Features & Benefits

- Extend PoE installation range by additional 100m
- Supports 10/100/1000Mbps data rates
- Provides 802.3af power levels when powered by any 802.3at source
- Provides 802.3at power levels when powered by PD-9500G Midspans
- Extenders can be cascaded to reach up to 500m
- Cost effective installation - no need for local power
- Plug and play installation - no configuration needed

Part/SKU

PoE-extender



High Power Splitter

High-Power active splitters enable data terminals that were not originally designed to accept power from the Ethernet, to be powered by Power over Ethernet midspans. The PDAS-951 High Power splitter (user selectable 12V or 24V) can power devices such as WiMAX CPEs, small WiMAX base-stations, 802.11n Access-Points, Thin- Clients, PTZ (Pan/Tilt/Zoom) IP Cameras, Videophones and more.

Features & Benefits

- Connectors 2 x RJ-45, shielded, EIA 568A and 568B DC Jacks On unit: O.D x I.D = 2.5 x 6.4 mm Ext. Cable #1: O.D x I.D = 5.5 x 2.5 mm Ext. Cable #2: O.D x I.D = 3.4 x 1.4 mm
- Data Rate 10/100/1000 Electrical Pin Assignment & Polarity: 3/6 (+),1/2 (-) or 4/5 (+),7/8 (-) Input voltage: 44 - 57 Vdc Input power: 70W max Output power: 54W max Output Current: 5A@12V; 2.5A@24V
- Dimensions & Weight 38 mm (H) x 130 mm (W) x 73 mm (D) (2.2 in x 3.2 in x 1 in) 285 gram (0.63 lbs)
- Indicators Output Power Indicators: Green LED (4-pairs), Yellow LED (2-pairs) Environmental Operating Temp: 0 to 40°C (32° to 104°F) Storage Temp: -20° to 70°C (-4° to 158°F) Operating Humidity: 10% to 90%, non-condensing Storage Humidity: 5% to 95%, non-condensing
- Thermal Rating: 38 BTU/Hr
- Reliability MTBF: 100,000 hours @ 25°C Electromagnetic Emissions FCC Part 15 Class A & Immunity EN55022 (CISPR 22), Class A EN55024 (CISPR 24) Regulatory Compliance CE Warranty 1-year

Part/SKU

PD-AS-951/12-24



More than just a distributor

At Solid State Supplies, we have been delivering Industrial and High-Reliability electronic products to customers for almost 50 years - and we are still excited by it!

Our remarkable team of experienced and dedicated staff are here to support you anywhere from concept to production. Whether you need assistance with product selection, installation or field support, we are here for you.

In addition to our collection of 'plug-and-play' products, our technical team can also offer support to our customers to design and develop their own customised product to meet their market-specific needs. Our value added services include:

- Custom branding
- Software/firmware installation
- System/box build
- Bespoke product design
- Default setup configuration

Our company's Quality Management System is in accordance with the International Aerospace standard AS9120; we are a trusted supplier to many large corporate and government organisations.

Established in 1971 and headquartered in Redditch, Solid State Plc now employs over 200 staff across the UK with international branches and capabilities in the USA and Asia.

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