

10/100/1000Base-T to SFP Gigabit Enterprise PoE PSE Media Converter



General Description

10/100/1000Base-T to 1000Base-SX/LX (SFP) GbE media converter, which allows two types of network segments to be connected easily and inexpensively. Complied with IEEE802.3af Power Over Ethernet standard, this AC powered PoE media converter is a Power Sourcing Equipment (PSE) which combines data received over a TP link with -48VDC power, providing power to IEEE802.3af powered device (PD) over the existing CAT5 UTP cable. The converter includes a PD signature sensing and power monitoring features. Other features include over-current protection, under-current detection and fault protection input. The LFP (Link Fault Pass-through) allows the media converter to monitor both the fiber and copper RX ports for loss of signal. In case of a loss of RX signal on one media port, the converter will automatically disable the TX signal to the other media port, thus passing through the link fault. FEF (Far End Fault) enables the converter to stop sending link pulse to the link partner once a loss of the fiber RX signal is encountered. Then the link partner will synchronously stop sending data. FEF prevents loss of valuable data transmitted over invalid link. Combining LFP and FEF troubleshooting features of RP-130GPPF, both end devices can be notified of a loss of fiber link.

Main features

- IEEE802.3af PoE (Power over Ethernet) PSE compatible
- PSE MDI power enable/disable
- Supports LFP (Link Fault Pass-through) and FEF (Far End Fault)
- Supports one 10/100/1000Base-T Gigabit Ethernet UTP port and one 1000Base-SX / LX (SFP) Gigabit Ethernet Fiber port
- Supports 802.3x flow control for full-duplex ports and backpressure for half-duplex ports
- Supports auto mode on the TP port
- DIP switch to set configurations
- Supports jumbo frame (Normal Mode: 2KB, Cut-Through Mode: 9KB)

Specification

Standards	<ul style="list-style-type: none"> • IEEE802.3 10Base-T, IEEE802.3u 110ase-TX, • IEEE802.3z/ab 1000Base-T, • IEEE802.3x full-duplex flow control, • 1000Base-SX/LX
Interface	<ul style="list-style-type: none"> • 10/100/1000Base-TX: STP RJ-45, Auto-Negotiation, Auto-MDIX • 1000Base-SX/LX: SFP slot
Cable	<ul style="list-style-type: none"> • UTP: Cat. 5 cable and up to 100m • Fiber: <ul style="list-style-type: none"> 1000SX: 50/125, 62.5/125, or 100/140µm multi-mode 1000LX: 8.3/125, 8.7/125, 9/125 or 10/125µm single-mode
Data Transfer Rate	• 2000Mbps/full-duplex
PoE	<ul style="list-style-type: none"> • IEEE802.3af PoE PSE, End-Span via TP pin 1, 2, 3, 6 • Over-current protection , Under-current detection • Minimum load sensing , Fault Protection Input • PSE MDI power enable/disable
DIP switch	<ul style="list-style-type: none"> • DIP 1: LFP/LFP DIS • DIP 2: PoE/PoE DIS • DIP 3: Bridge Mode/Cut Through Mode
Jumbo frame	<ul style="list-style-type: none"> • Normal Mode: 2KB • Cut-Through Mode: 9KB
LED Indicators	<ul style="list-style-type: none"> • FX LNK/ACT(Green), TP LNK/ACT(Green), PWR(Green) • TP SPD (1000M Green; 100M Yellow) • PoE PSE-TX(Green: PoE is active; Red: PoE is disrupted) • 4W, 7W,15.4W(PD Class Type, Green)
Power Consumption	• 19W
Power Supply	• Internal Power supply 100~240VAC, 50/60Hz
Environment	<ul style="list-style-type: none"> • Operating Temperature: 0°C to 50°C • Operating Humidity: 5% to 90% (Non-Condensing)
Dimension	• 158 * W133 x H40 mm
Certification	• FCC, CE

Ordering Information:

1418MS-EIN-1002-SFP- PSE	10/100/1000Base-T to 1000X SFP Gigabit EnterprisePoE PSE Media Converter
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10/100/1000Base-TX to 100/1000Base-X SFP Industrial Enterprise series PoE+ Media Converter



Specification

Standards	<ul style="list-style-type: none"> IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE802.3x Flow Control and Back Pressure IEEE802.3af/atPoE
Data Processing	Store and Forward
Flow Control	IEEE 802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric): 4Gbps
MAC Table Size	2K
Jumbo Frame	9KB
Packet Buffer Size	1M
Interface	<ul style="list-style-type: none"> 1xRJ-45 10/100/1000BaseT(X) PSE withPoE Output power up to 30Watts or 60Watts 1x 100/1000M SFP slot
Network Cable	<ul style="list-style-type: none"> UTP/STP above Cat.5e Cable EIA/TIA-568 10-ohm (100m)
Protocol	CSMA/CD
POE Pin Assignment	<ul style="list-style-type: none"> 30 watts 2 pairs Mode A End Span V+, V+, V-, V- for pin 1, 2, 3, 6 60 watts 4 pairs Mode A End Span V+, V+, V-, V- for pin 1, 2, 3, 6 ; V+, V+, V-, V- for pin 4, 5, 7, 8
LED Indicators	<ul style="list-style-type: none"> PW1: ON- power good, OFF-power failed (Green) UTP LED: PD detected (Amber) ; Link/active (Green) SFP LED:SFP detected (Green)
DIP Switch	Set SFP speed 100M or 1000M
Reverse polarity protection	Present
Overload current protection	Present
Power Supply	<ul style="list-style-type: none"> 4 pin terminal block with 48V-56V VDC Power Input SW (Relay): Relay switch for alarm
Alarm Relay Contact	<ul style="list-style-type: none"> Relay outputs with current carrying capacity of 1 A @24VDC, Relay in short circuit mode when power fails. Relay in open circuit mode when power supply is connected
Power Consumption	2W@48 VDC Without PoE
PoE power	<ul style="list-style-type: none"> Max.PoE power 36watts at 56VDC input (RP-IMC800FP) Max.PoE power 72watts at 56VDC input (RP-IMC800FP-60W)
Removable Terminal Block	<ul style="list-style-type: none"> Provide 4 pin terminal block Wire range: 0.34mm² to 2.5mm² Solid wire (AWG):12-24/14-22 Stranded wire(AWG): 12-24/14-22 Torque:5lb-In/0.5Nm/0.56Nm Wire Strip length: 7-8mm
Operating Temperature	-40°C~75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C~85°C
Housing	Rugged Metal ,IP30 Protection
Dimension	103.5x32x81.5mm (LxWxD)
Installation mounting	DIN Rail mounting and Wall Mounting
Safety	IEC EN60950-1
EMC/EMS	CE, FCC
EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A
Vibration	EN 50155 / EN 60068-2-6
Shock	EN 50155 / EN 60068-2-27
Free Fall	EN 50155 / EN 60068-2-32

General Description

1418M-EOU-1002-SFP- PSE is an Industrial PoE Converter providing superior performance with stability, environmental adaptability. It equips with one 10/100/1000BASE-T RJ45 copper and one slot for 100/1000BASE-X SFP

The 1418M-EOU-1002 complies with IEEE 802.3af/at standards for supplying PoE power budget up to 30W and with its Cold-Design will not only power up your PD device, also reduce the excessive heat problem to a minimum. The operating temperature range from -40 to 75 Degree C allows 1418M-EOU-1002-SFP- PSE to be placed in almost any difficult environment.

With IP30 industrial case protection, the 1418M-EOU-1002-SFP- PSE provides a high level of immunity against corrosion and electromagnetic interference.1418M-EOU-1002-SFP- PSE also allows either DIN rail or wall mounting for efficient use of cabinet space.

Main features

- Supports 48V-56VDC, Redundant power input
- Adjustable SFP speed 100M or 1000M
- PoE Output power up to 30Watts or 60Watts
- Reverse polarity protection
- Overload current protection
- ESD protection diodes on RJ-45 port
- 2K MAC Table
- 9KB Jumbo Frame
- Rugged Metal IP30 Protection enclosure
- Operating Temperature: -40°C to +75°C

Ordering Information:

1418M-EOU-1002-SFP- PSE	10/100/1000Base-TX to 100/1000Base-X SFP Industrial PoE+Media Converter (30W)
1418M-EOU-1002-SFP- PSE/60	10/100/1000Base-TX to 100/1000Base-X SFP Industrial PoE+ Media Converter (60W)

10/100/1000Base-TX to 1000Base-X SFP Enterprise Smart Gigabit Media Converter



General Description

1418M-EIN-1002 is a 10/100/1000Mbps adaptive Gigabit Ethernet media converter, which can fully compatible with 10/100/1000Base-T Ethernet networks. The fiber media converter supports auto negotiation to bridge different speed networks and devices to a Gigabit fiber network.

It features an open SFP slot that lets you choose the SFP which suits your fiber connection mode (single / multimode) and distance requirements. The 1418M-EIN-1002 can be used as a card module, which can be easily installed into 1418M-EIN-1002 the 16 Slot, 2U Rack-mounted Chassis or for standalone operation.

Main features

- Supporting inter-conversion between adaptive 10Base-T/100Base-TX/1000Base-T with 1000Base-SX/LX
- 10/100/1000M media converter with SFP slot is available
- Supporting full-duplex and half-duplex and its auto-sensed
- Supporting auto-sense of MDI/MDI-X, facilitating system commissioning and installation
- Supporting flow control for full-duplex and back pressure for half-duplex
- Supporting the transmission of extra-long VLAN packets
- Supporting Quality of Service (QoS) and ensuring the transmission of VoIP packets;
- Options in single mode dual fiber, multi-mode dual fiber, and single mode in single fiber

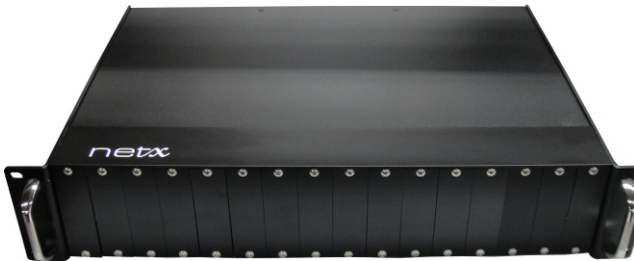
Specification

Standards	<ul style="list-style-type: none"> ● IEEE802.3 10Base-T Ethernet, IEEE802.3u 100Base-TX Fast Ethernet, ● IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-SX/LX Gigabit Ethernet ● IEEE802.3x Flow Control
Interface	<ul style="list-style-type: none"> ● One RJ45 port: 10/100/1000Mbps Gigabit Ethernet ● Connecting with STP/UTP category-5 twisted pairs, EIA568A/B ● One optical port: ● Multi-mode Dual-fiber: SC/LC(SFP) (50, 62.5/125μm) ● Single mode Dual-fiber: SC/FC/LC(SFP) (9/125μm)
Wavelength	<ul style="list-style-type: none"> ● 850nm/1310nm/1550nm
Transmission distance	<ul style="list-style-type: none"> ● Multi-mode Dual-fiber: 220m (62.5/125μm)/550m (50/125μm) ● Single mode Dual-fiber: 20/40/60/80 Km ● Single mode Single fiber: 20/40/60/80 Km ● Category-5 twisted pairs: 100m
Jumbo frame	<ul style="list-style-type: none"> ● 9K
LED indicators	<ul style="list-style-type: none"> ● POWER (power supply), FX LINK (optical link action) ● TP LINK1000 (TP cable rate 1000M), TP LINK100 (TP cable rate 100M) ● TP ACT (TP cable packet forwarding action)
Power Consumption	<ul style="list-style-type: none"> ● Max.3 Watts
Power Supply	<ul style="list-style-type: none"> ● External power adapter DC5V 2A
Operating Temperature	<ul style="list-style-type: none"> ● -10~55°C
Operating Humidity	<ul style="list-style-type: none"> ● 5% to 90% (Non-condensing)
Storage Temperature	<ul style="list-style-type: none"> ● -40~75° C
Maintaining humidity	<ul style="list-style-type: none"> ● 5% ~ 90% non-condensing
Dimension	<ul style="list-style-type: none"> ● 26L x 114W x 88D(Slider card)
Certification	<ul style="list-style-type: none"> ● FCC, CE

Ordering Information:

1418M-EIN-1002-SFP	10/100/1000Base-TX to SFP Gigabit Media Converter, with int. power supply 220VAC
1418M-EIN-1002-SFP-C	10/100/1000Base-TX to SFP Gigabit Media Converter Slider Card

16-Slot Media Converter Rack Enterprise series



General Description

1418M-EIN-C16-AC is a specially designed chassis to accommodate the 1418M-EIN-1002-SFP series slide-in converters. A chassis hosts up to 16 pieces of various media converters, which can be used standalone or slide into the chassis.

All the converters connected directly to the chassis's power backplane with a redundant power supply. It contains two power supply units. Each power supply is capable of powering the entire device and only one runs at a time. If one fails, the other power supply will start running to keep the device powered up. The power code won't be required when multiple converters be managed together.

Main features

- Provide housing for up to 16 media converters
- Front panel LED indications
- Hot swappable, easy & quick replacement of converters and power supplies
- Provide two power supplies enabling the system to work under many operating environments
- Supporting simultaneous operation of several module-type media converters at different rates, which greatly improves system adaptability
- Standard 19" rack-mount size, 2U height

Specification

Slots Number	● 16 slots for converter slider card
Structure	● 2U rack
LED Indicator	● POWER (power supply)
Power Supply	<ul style="list-style-type: none"> ● 2 * hot-swappable power supply(optional second power supply for load-sharing) ● AC Input: AC 85~265V; frequency: 50/60 Hz ● DC Input: DC -36~72V
Power output	● DC5V, 12A
Ripple	● ≤200mv
power consumption	● 50W
Environment	<ul style="list-style-type: none"> ● Operating Temperature: -10~55°C ● Store Temperature: -40~70°C ● Operating Humidity: 5~90% (Non-Condensing)
Dimension	● 423x 90x286mm (LxWxD)
Certification	● FCC, CE

Ordering Information:

1418M-EIN-16-AC	16 slot 2U chassis with 1 AC110-240V power unit
1418M-EIN-16-2-AC	16 slot 2U chassis with 2 AC110-240V power unit
1418M-EIN-16-DC	16 slot 2U chassis with 1 DC48V power unit
1418M-EIN-16-2-DC	16 slot 2U chassis with 2 DC48V power unit
1418M-EIN-16-2-ADC	16 slot 2U chassis with 1 AC110-240V power unit and 1 DC48V power unit