

HMC-IDM-G1NPp

Industrial Grade 10/100/1000Base-TX (PoE+) to 1000Base-FX Ethernet Media Converter with Redundant DC Power Inputs

Features



- 1-port 10/100/1000Base-Tx RJ-45 with Auto-Negotiation and Auto-MDI/MDI-X function
- Complies with 802.3af/at PSE standard (30W)
- 1-port 100Base-Fx interface SC
- 48 to 57VDC redundant power inputs
- Support 6KV DC Ethernet ESD protection
- Support 6KV DC EFT protection for power line
- Free Fall, Shock and Vibration Stability
- Supports DIN-Rail and Wall-mount installation



Specifications

Ethernet

Standards	IEEE 802.3 10Base-T; IEEE 802.3i 10Base-T; IEEE 802.3u; 100Base-TX/FX; IEEE 802.3ab 1000Base-T; IEEE 802.3z 1000Base-X; IEEE 802.3x;
Processing Type	Store and forward
Forward Filter Rate	14,880pps (10Mbps) 148,800pps (100Mbps) 1,488,000pps (1000Mbps)
Cabling	10Base-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 or later UTP(≤10meter) 1000BASE-TX: Cat6 or later UTP(≤100 meter)
Bandwidth	14 Gbps
Packet Buffer Memory	1.2 Mbit
Packet Forward Rate	10.5 Mpps
MAC Address Table	2K
Maximum Frame Size	9000bytes packet size
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex

Interface

RJ45 port	10/100/1000Mbps-Full/Half-duplex, Auto-negotiation, Auto MDI/MDI-X
PoE port	IEEE 802.3af/at, PSE (30W) , 1/2(+), 3/6(-)
Optical	SC
LED Indicators	Power: Red; Fiber: Link 2(Green); Ethernet: Yellow;

Optical

Cabling	62.5/125μm (Multimode) 9/125μm (Singlemode)
Maximum Distance	2Km (Multimode)

Wavelength	20Km (Singlemode) 1310nm
Connector	1310/1550nm SC

Electrical and Mechanical

Input Power	48-57VDC (Terminal block, Redundant power)
Power Consumption	Max. 3W (without PoE); Max. 33W (with PoE)
Surge Protection	±4KV
Dimensions	118 x 86 x 39 mm
Weight	360g
Casing	Aluminium case, IP40
Mounting options	DIN-Rail and Wall Mount

Environmental

Operating Temperature	-20°C to 70°C (-4°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	5% to 95% non-condensing
MTBF	> 300,000 hrs

Regulatory Approvals (Pending)

EN IEC 62368-1:2020 + A11:2020	IEC61000-4-3 (RS): 10V/m (80~1000MHz)
FCC Part 15, Subpart B	IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
ANSI C63.4: 2014	IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV
FCC CFR47 Part 15, EN55022/CISPR22, Class A	IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
IEC61000-4-2 (ESD): ±8kV (contact), ±12kV (air)	IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

Ordering Information

Available Model	Description
HMC-IDM-G1NPP	Industrial Grade 10/100/1000Base-TX (PoE+) to 1000Base-FX Ethernet Media Converter with Redundant DC Power Inputs

(X) =	Fiber Options	Wavelengths	Link Budget	Max. Distance
A	Multimode/2-fiber/SC	1310nm	15db	2km
B	Singlemode/2-fiber/SC	1310nm	19dB	20km
E	Singlemode/WDM 1-fiber/SC	TX:1310nm/RX:1550nm	19dB	20km
F	Singlemode/WDM 1-fiber/SC	TX:1550nm/RX:1310nm	19dB	20km

Optional Accessories (to be purchased separately)

Power Supply	Recommended power supply: MDR-40-48. Please refer to the Power Adaptors and Power supply page for more information.
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Package Checklist

- Gigabit Ethernet PoE Media Converter x1
- Quick Installation Guide x1

NOTES:

- Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.
- Operating distance of multimode is limited by the characteristics of the fiber bandwidth.
- Please feel free to consult factory for any special requirement and customization.

