

ITS EXPRESS

A **HN** HARDENED NETWORKS BRAND



HN-MC-1000 Overview

ITS Express/ Hardened Networks products have been specifically engineered to exceed the challenging demands of extreme environmental conditions and high bandwidth 5k multicast video streams.

Whether a media converter or a Full Layer 3 switch, the design incorporates best-in-class chipsets to provide an extremely robust, redundant architecture able to be reliable in any integration.

- ▶ EEE 802.3 compliant
- ▶ Copper port supports auto-negotiation for 10/100/1000, full duplex or half duplex data
- ▶ Optical port supports 100 or 1000 Mbps full duplex data
- ▶ Distances up to 160 km SM with optional SFPs
- ▶ Uses interchangeable SFP modules for fiber type, distance, and connector
- ▶ No in-field optical adjustments required
- ▶ LED indicators provided for confirming equipment operating status
- ▶ Voltage transient protection on all power and signal input/output lines
- ▶ provides protection from power surges and other voltage transient events
- ▶ distance and connector

ITS Express/ Hardened Networks fiber optic media converter is designed to convert 10/100/1000 Mbps base T (copper/ethernet) to 100/1000 Mbps SFP over fiber.

This unit can use 100FX or 1000SX or SXL(2 KM) MM, or 100/1000 BX/LX/EX/ZX/SM fiber optic via a pluggable (SFP) module.

These fiber optic media converter devices can be used to transmit ethernet data up to 160KM. The SFP modules are ordered separately to meet user requirements for mode type, distance, and type of optical connector.

Switch Model	HN-MC-1000
Interface	Ethernet
Technology	
Data Rate	-10/100/1000 Mbps -IEEE 802.3 Compliant -Full Duplex or Half Duplex Copper Port -Full Duplex SFP Port
Connectors	-Power: Terminal block -Electrical: RJ-45 (10/100/1000 BASE-T/TX) -Socket: SFP (100/1000)
LED Indicators	-Green: Indicates a good fiber connection -Flashing Green: Indicates data is present on at least one side of the IP connection -No LED Lit: Indicates a loss fiber connection -Green: Power is supplied -None: No power is supplied
RJ-45 Connector	-Right side, Flashing Green: Data is present -Right side, Off: No data is present
Power Requirements	Input: 12-48 VDC
Current Protection	-Automatic resettable -Solid-state current limiters
Circuit Board	Meets IPC Standard
Physical Characteristics	
Weight (lb)	Less than 1 lb
Dimension (W x D x H)	6.3 X 5.1 X 1.1 in (16 X 13 X 2.8 cm)
Environmental	
Storage Temperature	-40 to 90C (-40 to 194F)
Operating Temperature	-40 to 85C (-40 to 185F)
Operating Humidity	0% to 95% Non-condensing Meets TS2 Requirements
MTBF	> 200,000 hours
Warranty	1 Year



Other Solutions

Hardened Networks has created variety of high quality products to fit your needs. If you did not find what you needed in the HN-MC-1000, please browse our other solutions.

Ethernet Switches

Communications



HN-8012-24 V3

- 4 Ultra Fiber Ports SFP+ 100Mb/1000Mb/2.5Gb/10Gb
- 4 Enhanced Fiber Ports SFP 100Mb/1000Mb/2.5Gb
- 16 Copper Ports 10Mb/100Mb/1000Mb
- 176 GBPS Back-Plane



HN-8042 V3

- 2 Ultra Fiber Ports SFP+ 100Mb/1000Mb/2.5Gb/10Gb
- 2 Enhanced Fiber Ports SFP 100Mb/1000Mb/2.5Gb
- 8 Copper Ports 10Mb/100Mb/1000Mb
- 96 GBPS Back-Plane



HN-8012-24+ V3

- 4 Ultra Fiber Ports SFP+ 100Mb/1000Mb/2.5Gb/10Gb
- 4 Enhanced Fiber Ports SFP 100Mb/1000Mb/2.5Gb
- 16 Copper Ports 10Mb/100Mb/1000Mb
- Two sets of bypass fiber ports
- 176 GBPS Back-Plane



HN-8042+ V3

- 2 Ultra Fiber Ports SFP+ 100Mb/1000Mb/2.5Gb/10Gb
- 2 Enhanced Fiber Ports SFP 100Mb/1000Mb/2.5Gb
- 8 Copper Ports 10Mb/100Mb/1000Mb
- Two sets of bypass fiber ports
- 96 GBPS Back-Plane



HN- MC-1000

- 10Mb/100Mb/1000Mbps Ethernet BASE-T/TX to SFP (MM or SM)
- Optical port supports 100Mb or 1000Mb full duplex data



HN- MC-100

- 10Mb/100Mbps Ethernet BASE-T/TX to SFP (MM or SM)
- Flexible power 18-46VAC/12-60 VDC



HN- VC-100

- High Speed VDSL-2 Technology
- 10Mb/100Mbps Ethernet BASE-T/TX to a pair of copper cables
- Flexible power 18-46VAC/12-60 VDC

We here at Hardened Networks are proud to carry products that are certified by:

