

ITS EXPRESS

A **HN** HARDENED NETWORKS BRAND



HN-VC-100 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.

- ▶ Steady VDSL2 data link distance up to 1.5 miles
- ▶ 24AWG UTP cable
- ▶ Supports two wire transmission
- ▶ DIP switches provided for easy configuration mode for Master (CO)/Slave (CPE)
- ▶ Supports asymmetric and symmetric bandwidth modes
- ▶ Redundant 12-48VDC power inputs with terminal block
- ▶ Ethernet port support of full/half duplex operation
- ▶ Rigid IP-30 mini-type housing design
- ▶ Din-rail and wall mounting enabled

VC-100 converts Ethernet to VDSL2 and back to ethernet to extend an ethernet connection over a pair of existing copper cables.

Distance will vary up to 1.5 miles (2400m) over the existing traffic signal interconnect (copper cable) bandwidth will vary depending on the cable type, gauge, cable quality, splices, terminations, and length.

Typical bandwidth will be between 1 MB to 100 MB, depending on factors, including cable separation (interference), moisture intrusion, impedance, cable design, etc.

Switch Model	HN-VC-100
Physical Ports	
100 Base-TX Ports in RJ45 Auto MDI/MDIX	1
100Mbps Ethernet Extender Ports	1 (Support 2-wired)
Technology	
Ethernet Standards	-IEEE 802.3u for 100Base-TX -VDSLITU T G.993.1 -VDSL2ITU T G.993.2
Processing	Store and Forward
Performance	
VDSL Speed	Refer to Appendix A.
Power	
Overload Current Protection	Present
Input Power	Dual 12 - 48 VDC power inputs at 4 pin terminal block
Power Consumption (Typ.)	4.75 watts
Physical Characteristics	
Dimension (W x D x H)	41(W) X 70(D) X 95.5 (H)mm (1.61 X 2.76 X 3.76 inch)
Weight (lb/g)	0.6lb/272g
Enclosure	IP-30
Environmental	
Storage Temperature	-40 to 75C (-40 to 167F)
Operating Temperature	-40 to 85C (-40 to 185F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) Class A
EMS	-EN61000-4-2 (ESD) -EN61000-4-3 (RS) -EN61000-4-4 (EFT) -EN61000-4-5 (Surge) -EN61000-4-6 (CS) -EN61000-4-8 -EN61000-4-11
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
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-VC-100, 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:

