iConverter®

iConverter 10/100VT 10/100 VLAN Managed Ethernet Media Converter

The *iConverter* 10/100VT managed media converters are members of the modular *iConverter* product family, and provide UTP to Fiber conversion as well as 10/100 UTP rate conversion.

The *iConverter* 10/100VT supports the IEEE 802.1Q and 802.1p standards. It supports the 802.1Q VLAN packet tagging and untagging for segregating data in Enterprise networks, and enabling secure separation of Service Provider network management and customer data to improve security and intrusion protection.

The 802.1p Q-in-Q stacked tags enable Service Providers to offer to their customers secure Ethernet Virtual Private Line services which isolates each customer's data traffic, as well as the Service Provider's management traffic.

The 10/100VT supports the 802.1p prioritization for the delivery of Quality of Service (QoS) to real-time applications such as voice or video over Ethernet.

Port VLAN enables the network administrator to specify and restrict traffic flow between the module's fiber, UTP and backplane ports to improve security and intrusion protection.

The *iConverter* 10/100VT supports Bandwidth and Port Access Controls. Bandwidth Control enables the network administrator to selectively allocate eight different levels of traffic bandwidth to different ports. Port Access Control allows for the remote enabling and disabling of individual port access, and maintains port configuration to easily re-enable access.

The *iConverter* 10/100VT supports multimode, single-mode, and single-fiber and features ST, SC and LC connectors. The UTP port supports 10/100 and Half/Full-Duplex autonegotiation with both hardware and software manual override controls. The 10/100VT also features two Ethernet backplane ports to provide connectivity to adjacent modules for network expansion and for in-band connectivity to an *iConverter* Network Management Module (NMM2).

The 10/100VT features user-selectable link fault detection modes to facilitate quick fault detection, isolation and reporting.

iConverter 10/100VT modules are hot-swappable and can be mounted in a 19-Module (2U high) or 5-Module (1U high) rack-mountable chassis (19-inch or 23-inch) with any combination of redundant AC, 24VDC or 48VDC power supplies. It can also be mounted in a 2-Module AC or 18 to 60VDC powered chassis, or in a 1-Module AC/DC powered chassis.



KEY FEATURES

- 10BASE-T or 100BASE-TX to Fast Ethernet fiber converter with 1536 bytes maximum frame size
- Supports IEEE 802.1Q Tag VLAN (with Q-in-Q) and Port VLAN
- Supports IEEE 802.1p Prioritization QoS
- Individual Port Bandwidth and Port Access Controls
- Per port MIB statistics
- Flash-upgradable memory
- Fiber port supports multimode, single-mode, and single-fiber with ST. SC and LC connectors
- UTP port supports auto-crossover, with 10/100 and Half/Full-Duplex auto-negotiation or forced setting
- Ethernet backplane ports for in-band management and expansion to adjacent modules
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- Management is available with the addition of a management module to the chassis
- SNMP management via *NetOutlook*® provides real-time port status, parameter configuration and trap notification
- Hot-swappable in a 19-Module, 5-Module, 2-Module or 1-Module chassis
- Lifetime Warranty and free 24/7 Technical Support



SPECIFICATIONS

Model Type	10/100VT						
Protocols	100BASE-FX, 10BASE-T, or 100BASE-TX (1536 bytes maximum frame size)						
Copper Connectors	RJ-45						
Fiber Connectors	SC, ST, LC, Single-Fiber SC						
Controls	UTP X-over, LS/LP, RFD, BP Enable, SFD, Auto/Man, 10/100, FDX/HDX						
LED Displays	Power, FO link, UTP link, Auto, FDX/HDX, 10/100						
Dimensions	W: 0.85" x D: 4.5" x H: 2.8"						
Weight	8 oz.						
Compliance	UL, CE, FCC Class A						
Power Requirement	0.7 @ 3.3VDC (typical)						
Temperature	Standard: 0 to 50° C Wide: -40 to 60° C Storage: -40 to 80° C						
Humidity	5 to 95% (non-condensing)						
Altitude	-100m to 4000m						
MTBF (hrs)	910,000						

MANAGEMENT

Management is accomplished by using a Network Management Module (NMM2) or a media converter with integrated management (such as an *iConverter* 10/100M2) that provides monitoring, remote configuration and trap notification. The management module can be accessed via SNMP, Telnet and via a serial port. The SNMP-based management is accomplished via Omnitron's intuitive, graphic-oriented *NetOutlook* management software or third party SNMP management software. Management via the Telnet and the serial interfaces have an easy-to-use, menu-driven interface.

Some of the 10/100VT parameters that can be monitored include link and data activity status, module's model and description, hardware and software revisions, serial number, and a user-defined identifier. The user-defined identifier can be used for labeling a module's location, customer name, inventory control, or other user-defined parameters.

The 10/100VT supports reporting of MIB statistics. Statistics are available for 32 variables per port, reporting real-time packet statistics to provide performance and operational monitoring.

The user can override the 10/100VT module's physical DIP-switch settings by using SNMP or Telnet to remotely configure DIP-switch-selectable parameters.

In addition to all standard *iConverter* SNMP traps such as module insertion and removal, the 10/100VT modules can generate traps on port state changes including link-up and link-down. Trap monitoring of specific events can be selectively enabled or disabled by the network administrator.

To facilitate future features and upgrades, the 10/100VT supports field upgrades using the flash memory feature. Software can be easily upgraded with the management module via FTP.

ORDERING INFORMATION

Туре	Distance	Connector Type		Tx	Rx	Min. Tx	Max. Tx	Min. Rx	Max. Rx	Min.	Link	
		ST	sc	LC	[nm]	[nm]	Power [dBm]	Power [dBm]	Power [dBm]	Power [dBm]	Attenuation (dB)	Budget [dB]
MM/DF	5km	8800-0	8802-0	-	1310	1310	-24	-14	-31	-14	-	7
SM/DF	30km	8801-1	8803-1	8807-1	1310	1310	-15	-8	-31	-8	-	16
SM/DF	60km	8801-2	8803-2	8807-2	1310	1310	-5	0	-31	-3	3	26
SM/DF	120km	-	8803-3	8807-3	1550	1550	-5	0	-31	-3	3	26
SM/SF	20km	-	8810-1	-	1310	1550	-15	-5	-30	-3	-	15
SM/SF	20km	-	8811-1	-	1550	1310	-15	-5	-30	-3	-	15
SM/SF	40km	-	8810-2	-	1310	1550	-8	0	-30	-3	3	22
SM/SF	40km	-	8811-2	-	1550	1310	-8	0	-30	-3	3	22

For wide temperature (-40 to 60° C), add a "W" to the end of the model number. Consult factory for extended temperature (-40 to 75° C) models.

When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other.

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