**MiLAN**

# *Raven*™ Series Advanced Media & Rate Converters

## MIL-RC3000 and MIL-RC6000 Series

- •**10/100Mbps to 100Mbps, or**
- •**100/1000Mbps to 1000Mbps Ethernet**
- •**Extends Network Distances up to 60 km**
- •**Bi-Directional WDM Single Fiber Models**
- •**Chassis-based or Standalone Models**
- •**Auto MDI/MDX, Auto-Negotiation, LinkSentry™**
- •**SNMP, Console and Web-based Management**

The Raven Series of Converters offers connectivity solutions for a broad range of environments. Whether connecting two remote locations, or solving a difficult wiring closet issue, the Raven Series has a product to meet your needs. The standalone converters are ideal for remote locations requiring a single, cost effective fiber link. These converters may be consolidated into a 19 inch rack system, allowing for utilization of a common product in the main or intermediate distribution frame and at the remote location. For those needing visibility into how their network is operating, a managed media conversion system is available.

The Raven Series is designed with ease of use in mind. The UTP port will auto-detect the cabling type (cross over or straight through), the polarity of the pins, the speed of the port and the mode of the port without any user intervention. No more concerns about what type of device the converter is connecting, whether hub or server. The broad range of media for the fiber port makes for optimal flexibility in designing the network, and upgrading the network in the future.

This product has been designed with diagnostic functions as well. The LinkSentry™ feature allows for passing through physical layer failures from one media to the other. This allows for a higher reliability in your network by making all components aware of network failures as they occur. The managed system takes this further by sending traps when link failures are seen on the ports.

The ease of use, flexibility in network design, Advanced diagnostic capabilities and management features make the Raven series of converters the optimal conversion product for your network.

**MiLAN**

*Print Servers*     *802.11b Wireless*     *Media Converters*     *Switches*     *Transceivers*

# *Raven*™ Series Advanced Media & Rate Converters

## MIL-RC3000 and MIL-RC6000 Series

### 100BaseFX Fiber Features
MAC Address Table: 1024 addresses
Forwarding and Filtering Rate:
148,880pps for 100Mbps; 14,880pps for 10Mbps
Standalone Latency: 18100ns (64 byte packet,100Mbps full duplex)
Modular Latency: 20785ns (64 byte packet,100Mbps full duplex)

### 100BaseFX Fiber Port Characteristics
*Multi-mode*
Speed: 100BASE-FX Multi-mode (2km)
Transmitter: Wavelength 1310nm
Output Power (50/125μm): -23.5dBm
Output Power (62.5/125μm): -20dBm
Receiver: Wavelength 1310nm;
Sensitivity: -30dBm

*Single-mode*
Speed: 100BASE-FX Single mode (15km)
Transmitter: Wavelength 1310nm
Output Power (8 or 9/125μm): -20dBm
Receiver: Wavelength 1310nm
Sensitivity: -32dBm

Speed: 100BASE-FX Single mode (30km)
Transmitter: Wavelength 1310nm
Output Power (8 or 9/125μm):-15dBm
Receiver: Wavelength 1310nm
Sensitivity:-34dBm

Speed: 100BASE-FX Single mode (60km)
Transmitter: Wavelength 1310nm
Output Power (8 or 9/125μm): -5dBm
Receiver: Wavelength 1310nm
Sensitivity: -35dBm

### WDM
Speed: 100BASE-FX Single mode (15km)
Transmitter: Wavelength 1310nm or 1550nm
Output Power (8 or 9/125um):-8dBm
Receiver: Wavelength 1550nm or 1310nm
Sensitivity:-31dBm

### Gigabit Fiber Features
MAC Address Table: 1024 addresses
Forwarding and Filtering Rate:
1,488,800pps for 1000Mbps, 148,880pps for 100Mbps; 14,880pps for 10Mbps
Standalone Latency: 6270ns (64 byte packet,100Mbps full duplex)
Modular Latency: 5140ns (64 byte packet,100Mbps full duplex)

### Gigabit Fiber Port Characteristics
Speed: 1000BASE-SX Multi-mode (220m)
Transmitter: Wavelength 850nm
Output Power (50 or 62.5/125μm): -9.5dBm
Receiver: Wavelength 850nm;
Sensitivity: -17dBm

Speed: 1000BASE-LX Single mode (5km)
Transmitter: Wavelength 1310nm
Output Power (9/125μm): -9.5dBm
Receiver: Wavelength 1310nm
Sensitivity: -20dBm

### Physical Characteristics
*MIL-RC311X and MIL-RC6113XX Series - Standalone*
Dimensions: 84.14 mm x 120.65 mm x 25.4 mm (3.31″ W x 4.75" D x 1.0" H)
Weight: .75 lbs. (.34 kg)

*MIL-RC341X and MIL-RC6413XX Series - Modular*
Dimensions: 158.75 mm x 68.26 mm x 23.81 mm (2.69″ W x 6.25" L x .94" H)
Weight: .35 lbs (.1575Kg)

Operating Temperature: 0 to 50..C ( 32..F to 122..F )
Storage Temperature: - 25..C to 70..C ( -13..F to 158..F )
Operating Humidity: 10% to 95% ( non-condensing)

Standalone Power Supply Adapters:
Input Current: 1A
Input Voltage: 100VAC Country Specific @ 60Hz, 240VAC
Country Specific @ 50Hz
Output Voltage: 5V DC @ 700mA
Power Consumption: 14 Watts maximum
Power Adapters available for the MIL-RC311x Series: North America (US), Continental Europe (EU), United Kingdom (UK), Certified for country specific Safety requirements (cUL, TUV)

Functional Standards: IEEE 802.3, 802.3u, 802.3x
Emissions: FCC Class A, *CSA Class A, CE Mark, EN55022 Class B, EN55024*

*Ordering Information*
**Raven Converters - Standalone**
MIL-RC3112:      10/100BASE-TX / 100BASE-FX ST MMF 2km
MIL-RC3113:      10/100BASE-TX / 100BASE-FX SC MMF 2km
MIL-RC3113-15:   10/100BASE-TX / 100BASE-FX SC SMF 15km
MIL-RC3113-30:   10/100BASE-TX / 100BASE-FX SC SMF 30km
MIL-RC3113-60:   10/100BASE-TX / 100BASE-FX SC SMF 60km
MIL-RC31W13:     10/100BASE-TX / 100BASE-FX SC SMF TX 1360nm WDM
MIL-RC31W15:     10/100BASE-TX / 100BASE-FX SC SMF TX 1550nm WDM
MIL-RC6113SX:    100/1000BASE-TX / 1000BASE-SX SC MMF 220m
MIL-RC6113LX:    100/1000BASE-TX / 1000BASE-LX SC SMF 5km

**Raven Converters- Modules**
MIL-RC3412:      10/100BASE-TX / 100BASE-FX ST MMF 2km
MIL-RC3413:      10/100BASE-TX / 100BASE-FX SC MMF 2km
MIL-RC3413-15:   10/100BASE-TX / 100BASE-FX SC SMF 15km
MIL-RC3413-30:   10/100BASE-TX / 100BASE-FX SC SMF 30km
MIL-RC3413-60:   10/100BASE-TX / 100BASE-FX SC SMF 60km
MIL-RC34W13:     10/100BASE-TX / 100BASE-FX SC SMF TX 1360nm WDM
MIL-RC34W15:     10/100BASE-TX / 100BASE-FX SC SMF TX 1550nm WDM
MIL-RC6413SX:    100/1000BASE-TX / 1000BASE-SX SC MMF 220m
MIL-RC6413LX:    100/1000BASE-TX / 1000BASE-LX SC SMF 5km
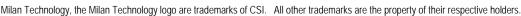
**Raven Converters- Chassis** (See Chassis Datasheet for Detailed specifications)
MIL-RCM16:       16 slot chassis with management module for Raven Modules
MIL-RCS10:       10 slot chassis for standalone Raven Converters

### Warranty
Comprehensive 5 years