

iConverter

iConverter® RS232 **Managed Serial RS-232 to Fiber Media Converter**

The Omnitron *iConverter* RS232 is a managed serial RS-232 to fiber converter that transmits serial protocol over fiber media. Fiber transmission extends the serial signals up to 120km, and is immune from electrical and magnetic interference.

The RS232 supports single-mode, multimode, and single-fiber. The serial port interface is available with either a DB-9 female connector or terminal block connector for field wiring.

The RS232 automatically detects the signal baud rate of the connected serial device, ranging from 110 to 921,600 baud. It also automatically adjusts to changes in the connected device's baud rate during operation without reconfiguration or interruption of service.

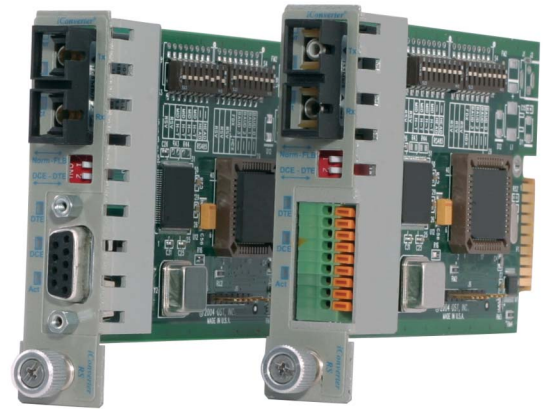
Connection to DTE or DCE devices is configured by an easily accessible DIP-switch on the front-panel of the module. This feature eliminates the need to use a null-modem cable when connecting two serial devices of the same type.

A built-in Fiber Loopback DIP-switch provides easy validation of the entire fiber segment without interrupting fiber operations.

iConverter RS232 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. They can also be mounted in a 2-Module AC or 18 to 60VDC powered chassis, or in a 1-Module AC/DC powered chassis.



The *iConverter* family of managed fiber access media converters are used in Service Provider access networks and Enterprise LANs. *iConverter* media converters provide fiber connectivity with copper to fiber, multimode fiber to single-mode fiber, or dual fiber to single-fiber conversions.



- Managed Serial RS-232 to fiber media converter with automatic baud rate detection
- Supports baud rates ranging from 110 to 921,600 baud
- Supports multimode, single-mode and single-fiber with ST, SC, LC and MT-RJ connectors
- Supports distances up to 5km on multimode and 120km on single-mode
- Supports DB-9 and Terminal Block connector options for serial RS-232 interface
- DIP-switch configuration of DTE or DCE device for easy connection to serial devices
- Supports RTS, CTS, DCD, DTR and DSR controls
- Features remote fiber loopback switch for easy testing of fiber link, even during serial transmission
- Management is available with the addition of a management module to the chassis
- SNMP management via *NetOutlook™* provides real-time port and module information, remote parameter configuration and trap notification
- Modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis
- Lifetime Warranty and free 24/7 Technical Support

SPECIFICATIONS

| | |
|--------------------------|---|
| Model Type | RS232 |
| Protocols | Asynchronous Serial RS-232 |
| Copper Connectors | DB-9 Female or Terminal Block |
| Fiber Connectors | ST, SC, MT-RJ, LC |
| Controls | DTE/DCE, Fiber Loop-Back |
| LED Displays | Power, Test, Fiber Lnk/Act, DTE, DCE, Serial Act |
| Dimensions | W:0.85" x D:4.5" x H:2.8" |
| Weight | 8 oz. |
| Compliance | UL, CE, FCC Class A |
| Power Requirement | 0.5A @ 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) | 850,000 |

MANAGEMENT

Management is accomplished by using management module 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 RS232 parameters that can be monitored include fiber link status, module's model and description, hardware and software revisions, serial number and a user-defined identifier.

Remote configuration of the RS232 module enables DTE or DCE selection and Fiber Loopback test, and is capable of overriding of physical DIP-switch settings. In case of power removal, the configuration can be reloaded from the management module.

In addition to all standard *iConverter* SNMP traps such as module insertion and removal, the RS232 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.

ORDERING INFORMATION

| Model Type | Fiber / Media Type | Distance | Connector Types | | | | Tx Wavelength (nm) | Rx Wavelength (nm) | Min. Tx Power (dBm) | Max. Tx Power (dBm) | Min. Rx Sense (dBm) | Max. Rx Power (dBm) | Link Budget |
|--------------------|--------------------|----------|-----------------|--------|--------|--------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|-------------|
| | | | ST | SC | MT-RJ | LC | | | | | | | |
| RS232 Dual Fiber | MM | 5km | 8760-0 | 8762-0 | 8764-0 | - | 1310 | 1310 | -24 | -14 | -31 | -14 | 7 |
| | SM | 30km | 8761-1 | 8763-1 | 8765-1 | 8767-1 | 1310 | 1310 | -15 | -8 | -31 | -8 | 16 |
| | SM | 60km | 8761-2 | 8763-2 | - | 8767-2 | 1310 | 1310 | -5 | 0 | -31 | -3* | 26 |
| | SM | 120km | - | 8763-3 | - | 8767-3 | 1550 | 1550 | -5 | 0 | -31 | -3* | 26 |
| RS232 Single-Fiber | SM | 20km | - | 8770-1 | - | - | 1310 | 1550 | -15 | -5 | -30 | -3 | 15 |
| | SM | 40km | - | 8770-2 | - | - | 1310 | 1550 | -8 | 0 | -30 | -3* | 22 |
| | SM | 20km | - | 8771-1 | - | - | 1550 | 1310 | -15 | -5 | -30 | -3 | 15 |
| | SM | 40km | - | 8771-2 | - | - | 1550 | 1310 | -8 | 0 | -30 | -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.

When ordering module with terminal block serial port, append 'T' before the dash '-' in the part number. Examples: 8760T-0, 8763T-3, 8770T-1

*A minimum of 3dB of attenuation is required for these models.