```
Management Options iConverter, Serial Agent
Network Management
1:  Chassis and Module Management
2:  Set Module Name Preferences
Management Module Preferences
3:  IP and Control Preferences
4:  SNMP Preferences
5:  Abandon Preference Changes
6:  Save Preference Changes
7:  Restore Factory Defaults
8:  Restart Management Module
9:  Other Networking Features
Management Module Maintenance
10: Firmware Update
11: Set Date/Time

IP Address  = 192.168.1.220
Chassis Number = 1

Enter Choice, <H>elp, E<x>it >
```

Figure D: Command Line Interface Menu Options

The CLI interface allows for the detailed configuration of the module. It is recommended to configure the module with an IP address associated with the attached network. Also, SNMP traphost address should be configured if the module is managed with an SNMP-based Management System. See the 10/100M User Manual for complete information.

4) VERIFY OPERATION

Once the module has been installed and configured per steps 1 - 3, verify the module is operational by viewing the LED indicators.

The Power LED indicates the module is receiving power from the chassis.

The Fiber Optic link LED indicates the fiber optic connection has been established. Verify the Link Mode selection is set to Link Segment (LS). Until a stable link is established, leave the Link Mode configured for LS. After a Link presence is established, the Link Mode selection can be modified.

LED Function "Legend"	Color	OFF State	ON / Blinking State
Power "Pwr"	Amber	No power	Module has power
Power Supply Status "PSx"	Amber	Power Supply not installed	ON: Power Available Blinking: No power available from "PSx"
Network Ports Status*			
Fiber Optics "FO"	Green	No Fiber Link	ON: Fiber link is active Blinking: Fiber Data Activity
Master/Slave "BP"	Green	Slave Mode	Master Mode
10Mbps UTP "10"	Green	10Mbps not selected or disconnected	ON: Active 10Mbps UTP link Blinking: UTP Data Activity
100Mbps UTP "100"	Green	100Mbps not selected or disconnected	ON: Active100Mbps UTP link Blinking: UTP Data Activity
UTP Full-Duplex "FDX"	Green	Half-Duplex	Full-Duplex
*Review Link Modes section for other LED display patterns			

Figure E: LED Indicators

The UTP link LED indicates the module has established a connection across its UTP port.

Form 040-08900-002 J 12/07

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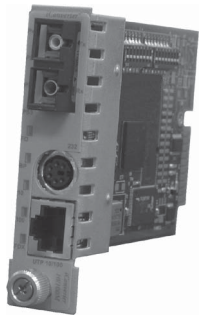
iConverter 10/100M Plug-in Module QUICK START GUIDE



The Omnitron *iConverter*®10/100M Plug-In is a carrier-class media converter and a Network Interface Device (NID) that provides 10BASE-T or 100BASE-TX (10/100) to 100BASE-FX Fiber media conversion with integrated management.

The 10/100M conforms to Ethernet in the First Mile (EFM) fiber standards to support Fiber-to-the-X (FTTX) Metropolitan access and Enterprise LAN networks. Built-in Operation, Administration and Maintenance (OAM) functionality enables the 10/100M to operate as a managed copper demarcation point at the customer premises and network edge, offering service provisioning functions, such as Quality of Service and Bandwidth Control (rate-limiting) capabilities.

The 10/100M module can be managed using Omnitron's *NetOulook*™ SNMP Management Software, Telnet or the Command Line Interface (CLI).

For more information, including the complete User Manual on the 10/100M Plug-in module, access Omnitron's documentation download web page to view all relevant documents:

http://www.omnitron-systems.com/downloads.php

INSTALLATION PROCEDURE

1) Configure DIP-Switches
2) Install Module in Chassis and Connect Cables
3) Configure Module via Command Line Interface
4) Verify Operation

1) CONFIGURE DIP-SWITCHES

DIP-SWITCH BANK 1

SW1 - UTP/FIBER PAUSE ENABLE

When a port is operating in Auto-Negotiation (AN), its Pause operation mode is determined by the Pause capability advertised during AN between itself and the link partner. The port advertises its Pause capability (Symmetrical or No Pause) during AN based on the Pause Disable/Enable DIP-switch setting.

When a port is operating in Manual mode, its Pause operation mode is based on the Pause Disable/Enable DIP-switch setting.

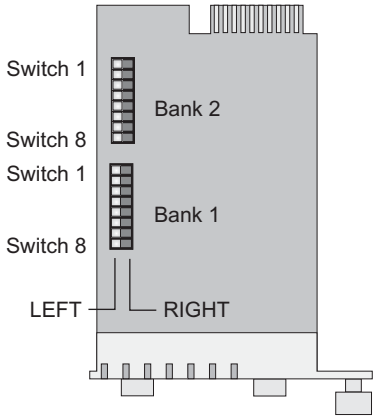


Figure A: DIP-Switch Locations

SW2 - FIBER FULL/HALF DUPLEX

Setting this DIP-switch to Half-Duplex "HDX" facilitates a connection that supports Half-Duplex. Setting this DIP-switch to Full-Duplex "FDX" facilitates a connection that supports Full-Duplex operation.

SW3 - UTP AUTO/MANUAL

When this DIP-switch is in the UTP Auto Negotiate "AN" position (factory default), the UTP port automatically determines the speed and duplex mode of the connecting UTP device.

When the UTP "AN/Man" DIP-switch is in the Auto Negotiate "AN" position and the UTP 10/100 DIP-switch is in the "100" position, the UTP port auto-negotiates to 100Mbps or 10Mbps. When in the "10" position, the UTP port only operates at 10Mbps

When the UTP "AN/Man" DIP-switch is in the Auto Negotiate "AN" position, and the UTP Full/Half-Duplex DIP-switch is in the Full-Duplex "FDX" position, the UTP port auto negotiates to Full or Half-Duplex. When in the Half-Duplex "HDX" position, the UTP port functions only in Half-Duplex.

SW4 - UTP 10/100Mbps

When the UTP "AN/Man" DIP-switch is in the manual "Man" position, the "10/100" DIP-switch determines the speed of operation for the UTP port.

SW5 - UTP FULL/HALF DUPLEX

When the UTP "AN/Man" DIP-switch is in the manual "Man" position, the UTP Full/Half-Duplex "FDX/HDX" DIP-switch determines the duplex operation mode of the UTP port.

SW6, SW7, SW8 - LINK MODES

The module supports multiple link modes for fault detection and isolation. Link Segment should be used for the initial installation of the module. Once installed and operational, the link mode can be modified.

Switch	Left (Factory Default)	Right
SW1	**Off:** Pause Disable	**PAUS:** Pause Enable
SW2	**FDX:** Fiber Full-Duplex	**HDX:** Fiber Half-Duplex
SW3	**AN:** UTP Auto-Negotiate	**MAN:** UTP Manual
SW4	**100:** UTP 100Mbps	**10:** UTP 10Mbps
SW5	**FDX:** UTP Full-Duplex	**HDX:** UTP Half-Duplex
SW6	**See Link Mode Selection**	
SW7	**See Link Mode Selection**	
SW8	**See Link Mode Selection**	

SW6	SW7	SW8	Link Mode Selection
Left	Left	Left	**Link Segment (LS)** (Factory Default)
Right	Left	Left	**Link Propagate (LP)**
Left	Right	Left	**Remote Fault Detect + Link Segment (RFD + LS)**
Right	Right	Left	**Remote Fault Detect + Link Propagate (RFD + LP)**
Left	Left	Right	**Symmetrical Fault Detect (SFD)**
Right	Left	Right	**Illegal Setting**
Left	Right	Right	**Illegal Setting**
Right	Right	Right	**Illegal Setting**

Figure B: DIP-Switch Bank 1

DIP-SWITCH BANK 2

SW1, SW2 - BACKPLANE ENABLE

When the DIP-switch is in the LEFT "DS" position (factory default), the Backplane Port of the 10/100M is isolated from the chassis' Ethernet Backplane. When the DIP-switch is in the RIGHT "EN" position, the Backplane Port is enabled. This allows Ethernet Backplane connectivity to an adjacent module via the chassis Backplane Link "A" or "B" depending on the switch setting.

SW4 - MASTER/SLAVE

When the 10/100M module is installed in a chassis with an *iConverter* Network Management Module (NMM), set the DIP-switch to the LEFT "M/SL" position (factory default). The assignment of mastership is automatically negotiated by the installed management modules. To designate the 10/100M module as the master of the chassis, set the DIP-switch on the module to the LEFT "M/SL" position, and set the other installed management modules' DIP-switches to the RIGHT "SL" position to enable Slave-Only mode.

Switch	Left (Factory Default)	Right
SW1	**A-DS:** Port A Disabled	**A-EN:** Port A Enabled
SW2	**B-DS:** Port B Disabled	**B-EN:** Port B Enabled
SW3	**Reserved**	**Reserved**
SW4	**M/SL:** Auto Select	**SL:** Slave-Mode Only
SW5 - SW8	**Reserved**	**Reserved**

Figure C: DIP-Switch Bank 2

2) INSTALL MODULE IN CHASSIS AND CONNECT CABLES

a. Carefully slide the module into an open slot in the chassis. Align the module with the installation guides and ensure that the module is firmly seated against the backplane. Secure the module by fastening the front panel thumbscrew (push in and turn clockwise to tighten) to the chassis front. Verify the "Pwr" LED is ON (indicating the chassis is powered).

b. When using a 10/100M SFP model (8919-0), insert the SFP Fiber transceiver into the Port 1 SFP receptacle on the 10/100M.

NOTE: The release latch of the SFP Fiber transceiver must be in the closed position before insertion.

c. Connect the UTP port via a Category 5 cable to a 10BASE-T or 100BASE-TX Ethernet device.

d. Connect an appropriate multimode or single-mode fiber cable to the fiber port of the installed module. It is important to ensure that the transmit (TX) is attached to the receive side of the device at the other end and the receive (RX) is attached to the transmit side. Single-fiber (SF) media converter models operate in pairs. The TX wavelength must match the RX wavelength at the other end and the RX wavelength must match the TX wavelength at the other end.

3) CONFIGURE MODULE VIA COMMAND LINE INTERFACE

To access the Command Line Interface (CLI), connect the 10/100M RS-232 Console Port to the COM port of a computer equipped with terminal emulation software such as HyperTerminal. The Console Port (DCE) is a mini DIN-6 female connector which can be changed to a DB-9 connector with the included adapter. The 10/100M Console Port is a standard asynchronous serial interface.

Start HyperTerminal and select the correct COM Port in the HyperTerminal "Connect To:" window. Set the serial port to the following:

Bits Per Second	57,600
Stop Bits	1
Data Bits	8
Parity	NONE
Hardware Flow Control	NONE

Once connected, press *<ENTER>* to bring up a command line prompt on the attached PC.