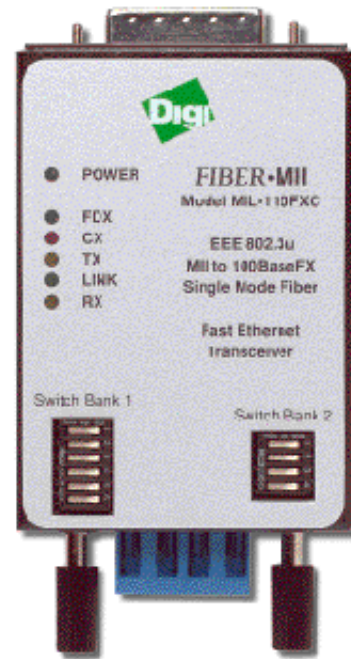
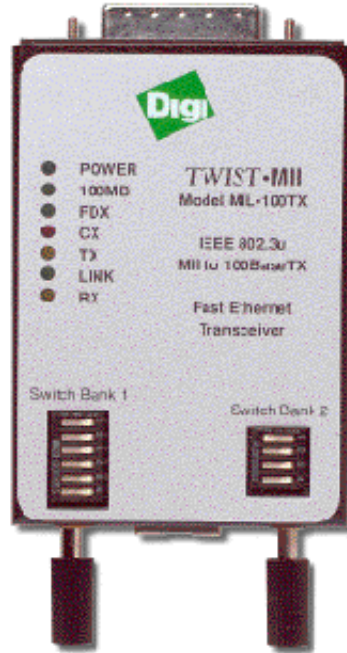


# Fast Ethernet Transceivers

D A T A  
S H E E T

## TWIST-MII and Fiber-MII MIL-100TX, MIL-100FX C/T, MIL-110FXC MII to UTP or Fiber 100Base Transceivers



- Auto-negotiation allows the 100BaseTX device to determine if it is running in half- or full-duplex mode and 10 or 100 Mbps mode
- Shielded connectors allow the use of screened or shielded UTP cabling to further reduce EMI and ESD issues
- A compact design and direct connection makes this an unseen, but powerful addition to your network
- 5 year warranty

The MIL-100TX transceiver is a 100BaseTX Fast Ethernet MII to UTP transceiver. The MIL-100TX, which is fully compliant with the IEEE 802.3u standard, features one UTP port and one direct connect MII 40 pin port. The MIL-100TX auto-senses either full- or half-duplex modes, 10 or 100 Mbps mode, and will adjust accordingly. Fast Ethernet full-duplex cabling provides bandwidth of up to 200Mbps. In addition, the MIL-100TX provides a shielded connector to allow the use of screened or shielded UTP cabling to further reduce EMI and ESD issues.

The MIL-100FX transceiver is a 100BaseFX Fast Ethernet multi-mode fiber optic to MII transceiver. The MIL-100FX, which is fully compliant with the IEEE 802.3u standard, features one fiber port using ST or SC style connectors and one direct connect MII, 40 pin port. The MIL-100FXC is a 100 Base FX Fast

Ethernet MII to Single Mode fiber optic transceiver. The transceivers rung in either full- or half-duplex modes. Fast Ethernet full-duplex cabling provides bandwidth of up to 200Mbps.

Fiber optic cabling is ideal for installations that require minimal electromagnetic interference. Full-duplex mode allows for transmission up to 2 Km for multimode fiber and 15 Km for single mode.

The tenfold increase of bandwidth over 10Base-T hardware will allow you to maintain your investment in Ethernet software drivers and gain the throughput your users are demanding. The streamlined compact design and direct connect MII port allows for an unobtrusive connection to your network.



# Features/Specifications

## Features

### MIL-100TX

- Supports conversion of Fast Ethernet MII ports to UTP Cabling
- Supports user defeatable, auto-negotiation between half- and full-duplex modes
- Direct connect Media Independent Interface (MII) port
- One Unshielded Twisted Pair (UTP) port
- Shielded RJ-45 connector
- Fully IEEE 802.3u 100BaseFX compliant
- Compact footprint

### MIL-100FX

- Supports conversion of Fast Ethernet MII ports to fiber optic Cabling
- Single or multi-mode fiber version
- Direct connect Media Independent Interface (MII) port
- One Unshielded Twisted Pair (UTP) port
- Shielded RJ-45 connector
- Fully IEEE 802.3u 100BaseFX compliant
- Compact footprint
- ST or SC style fiber connectors

## Product Package

- Installation guide

## Ports

### MIL-100BaseTX:

- UTP using shielded RJ-45 connectors
- Configured to connect to hub. To connect to DTE, swap UTP pins 1 to 3, 2 to 6, 3 to 1 and 6 to 2.

### MIL-100BaseFX:

- ST or SC style connectors

## Pin Assignment

1 TX +	5		
2 TX -	6 RX -		
3 RX +	7		
4	8		

## Fiber Optic Spec.

	Multi Mode	Single Mode
■ Wavelength	1300nm	1300nm
■ Launch Power	-14dBm	-8.0dBm
■ Receiver Sensitivity	-31dBm	-31dBm
■ Cable	61.5/125	8-9/125

## MII Port

- 40 pin direct connect, shielded male connector.

## Pin Assignment

PIN	SIGNAL	PIN	SIGNAL
1	+5V	21	+5V
2	MDIO	22	COMMON
3	MDC	23	COMMON
4	RXD_3	24	COMMON
5	RXD_2	25	COMMON
6	RXD_1	26	COMMON
7	RXD_0	27	COMMON
8	RX_DV	28	COMMON
9	RX_CLX	29	COMMON
10	RX_ER	30	COMMON
11	TX_ER	31	COMMON
12	TX_CLK	32	COMMON
13	TX_EN	33	COMMON
14	TXD_0	34	COMMON
15	TXD_1	35	COMMON
16	TXD_2	36	COMMON
17	TXD_3	37	COMMON

18 COL	38 COMMON
19 CRS	39 COMMON
20 +5V	40 +5V

## LED's

10 or 100 Mbps, Transmit, Receive, Collision, Link, Power, Full- or Half-Duplex

## Electrical

MIL-100TX & MIL-100FX  
5VDC 750 mA from MII port

## Switches

- Bank of 5 switches to select MII transceiver address (32 distinct addresses)
- Bank of 3 switches to select Auto-negotiation on/off, Half- or Full-Duplex, and 4B5B decoder on/off.
- 4th switch for 100TX to select 10 or Mbps.

## Standards Compliance

- FCC Class A
- CISPR-22 B
- UL 1950
- CSA 950
- EN60950
- CE Marked

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## Models and Part Numbers

UTP style connector	MIL-100TX
ST style connector	MIL-100FXT
SC style connector	MIL-100FXC

