



Model	F2802	F2804	F2805
Wavelength	MM 850nm	MM 1300nm	SM 1300nm
Connector	ST	ST	ST
Operating Range	2km	8km	14km

## GENERAL DESCRIPTION

VERSITRON FOM II Series F280X Modems are fiber optic products designed for use as an RS-232 interface extender or modem link. These units are DTE/DCE switch selectable and interface with other F280X Modems in VERSITRON's FOM II series. F280X Modems use multimode fiber optic cable up to 2 Km (6,560 ft.) for 850nm multimode optics, 8 Km (26,240 ft.) for 1300nm multimode optics, and single mode fiber optic cable up to 14 Km (45,920 ft.) for 1300nm single mode optics. ST connectors are standard for the fiber optic interface. Several different configurations are offered to accommodate a wide variety of fiber optic needs.

Housing options include a single card standalone enclosure, and 2-slot or 20-slot 19" rack-mount chassis. The 20-slot chassis is powered by AC150W power supplies and may utilize 2 power supplies for redundancy. Each modem installed in either the single card enclosure or the 2-slot chassis requires a separate power adapter.

## FEATURES

VERSITRON FOM II Series F280X Modems have a maximum data rate of 76.8 Kbps and appear fully transparent in both directions. The unit can generate 18 internal clock frequencies, and fully supports the interface control signals associated with the EIA RS-232 and MIL-STD-188C standards. This is accomplished by multiplexing the control signals along with clock and data signals and transmitting this serialized signal to the remote unit. At the remote unit the signal is de-multiplexed and applied to the interface. F280X Modems have seven indicators: Power (PWR), Alarm (ALM), Transmit Data (TXD), Receive Data (RXD), Transmit Clock (TxC), Receive Clock (RxC), and Loopback (LOOP).

## SPECIFICATIONS

### General

<b>Model</b>	F280x * <sup>1</sup>
<b>Dimensions</b>	7.0" (17.8 cm) W x 0.84" (2.1 cm) H x 11.6" (29.5 cm) D
<b>Weight</b>	16.0 oz (0.455 kg)
<b>Operating Temperature</b>	0° to 50°C (32° to 122°F)
<b>Storage Temperature</b>	-40° to 70°C (-40° to 158°F)
<b>Humidity</b>	Up to 95% relative humidity (noncondensing)
<b>Altitude</b>	Up to 10,000 ft

**Note:** \*<sup>1</sup> x is replaced with 2 for 850nm MM (2km), 4 for 1300nm MM (8km), or 5 for 1300nm SM (14km).

### Electrical Interface

<b>Model</b>	F280x * <sup>1</sup>
<b>Power Requirements</b>	12VDC / 1.2A
<b>Format</b>	EIA RS-232 / MIL-STD-188C
<b>Protocol</b>	Asynchronous/Synchronous/Isochronous
<b>Date Rate</b>	Continuously variable from 0 Bps to 76.8 Kbps synchronous (source or terminal timing), asynchronous, or isochronous (Clock must be supplied externally).
<b>Sample Rate</b>	Control signals are sampled at 18.75 KHz. Data and clock signals are sampled at 300 KHz.
<b>Operation</b>	Simplex, Half or Full duplex
<b>Electrical Interface</b>	DB25
<b>Optical Interface</b>	ST connectors
<b>Digital Interface</b>	Signal levels and format conform to EIA RS-232 / MIL-STD-188C.

**Note:** \*<sup>1</sup> x is replaced with 2 for 850nm MM (2km), 4 for 1300nm MM (8km), or 5 for 1300nm SM (14km).

### Fiber Optic Interface

Model	F2802	F2804	F2805
<b>Wavelength</b>	Multimode 850nm	Multimode 1300nm	Single Mode 1300nm
<b>Connector</b>	ST	ST	ST
<b>Link Budget</b>	>20 dB	>20 dB	>20 dB
<b>Operating Range</b>	2km / 1.25mi / 6,600ft	8km / 4.97mi / 26,200ft	14km / 8.7mi / 46,000ft
<b>Fiber Cable</b>	50/125, 62.5/125, 100/140µM * <sup>2</sup>	8/125, 9/125, 10/125µM * <sup>3</sup>	8/125, 9/125, 10/125µM * <sup>3</sup>

**Note:** \*<sup>2</sup> Multimode tests were performed on 62.5/125µM fiber optic cable.

\*<sup>3</sup> Single Mode tests were performed on 9/125µM fiber optic cable.

### Accessories

Model #	Description	Weight
<b>HF-1</b>	Single card standalone enclosure. 7.1"W x 1.3"H x 11.6"L (18 x 3.3 x 29.5 cm)	0.5 kg (18 oz)
<b>HF-2SS</b>	2-Slot 19" rack mount chassis. 19"W x 1.7"H x 13.8"L (48.3 x 4.3 x 35.1 cm)	1.2 kg (40 oz)
<b>HF-20</b>	20-Slot 19" rack mount chassis. 19"W x 7.1"H x 11.6"L (48.3 x 18 x 29.5 cm)	2.1 kg (73 oz)
<b>AC150W</b>	Power supply / system monitor. Two recommended for redundancy. (Used with HF-20.)	1.2 kg (43 oz)
<b>ADPHF01</b>	Blank panel, single slot.	0.05 kg (2 oz)
<b>ADPHF02</b>	Blank panel, double slot.	0.09 kg (3 oz)
<b>PSAC10</b>	Power adapter, 110vac to 12vdc/1.2A, (US). (Used with HF-1 and HF-2SS.)	0.4 kg (14 oz)

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