



Model	F2702 / F2712	F2704 / F2714	F2705 / F2715
Wavelength	MM 850nm LED	MM 1300nm LED	SM 1300nm LED
Connector	ST	ST	ST
Operating Range	2km	8km	14km

## GENERAL DESCRIPTION

VERSITRON FOM II Series TeleData Modems are used to extend a telephone and/or data (RS-485 or RS-422) link on duplex fiber optic cable or 4-wire twisted pair cable. The F270x functions as the exchange side modem while the F271x functions as the subscriber side modem. For intercom or ring-down applications, the F271x is used at each end of the connection. A RJ11 provides the copper interface for the telephone and/or data input. ST connectors are standard for the fiber optic interface. Several different configurations are offered to accommodate a wide variety of fiber optic needs.

These modems are available with 850nm multimode (MM) LEDs for distances up to 2km (1.25 mi / 6,600 ft), with 1300 MM LEDs for distances up to 8km (5 mi / 26,400 ft), or with 1300nm single mode (SM) LEDs for distances up to 14km (8.7 mi / 46,000 ft). Housing options include either single card or dual card standalone enclosures, 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 single or dual card enclosures or in 2-slot chassis requires an AC to DC power adapter.

## FEATURES

VERSITRON FOM II Series TeleData Modems digitizing process allows for a fully transparent fiber optic link. This digitizing process also provides reliable optical isolation for use with STU IIIs up to 9600 baud data transmission.

Annunciator lights are used as status indicators on F270x and F271x modems primarily for the telephone link status. Their functions are: (PWR) - Power on for normal operation; (HOOK) - Off-hook; (RING) - Ringing signal; (LOOP) - Loop current detect; (RBAT) - Reverse battery detect; (ALM) - Out of sync.

# SPECIFICATIONS



## General

Model	F270x / F271x * <sup>1</sup>
Dimensions	7"H x 0.9"W x 11.7"L (17.8 x 2.3 x 29.7 cm)
Weight	0.28 kg (10.0 oz)
Operating Temperature	0° to 50°C (32° to 122°F)
Storage Temperature	-40° to 70°C (-40° to 158°F)
Humidity	Up to 95% relative humidity (noncondensing)
Altitude	Up to 10,000 ft

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

## Electrical Interface

Model	F270x / F271x * <sup>1</sup>
Power Requirements	12VDC / 1.0A
Connector (Tip & Ring)	RJ11, 2-Wire Twisted Pair
Copper Interface Connector	RJ11, 4-Wire Twisted Pair
Data Transmission Connector	RJ45, CAT5 UTP
Audio Signal	Analog, 300Hz to 3.4Khz
Data Signal	RS-485 or RS-422 (asynchronous or isochronous) up to 64Kbps
Idle Channel Noise	-55dBm
In-band Spurious	-40dBm
Out-band Spurious	-30dBm
Talk Battery	45 to 55VDC
Loop Current	20mA max (off hook)
Ring Signal	80-150VAC, 15 to 68Hz
Line Impedance	600Ω or 900Ω

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

## Fiber Optic Interface

Model	F2702 / F2712	F2704 / F2714	F2705 / F2715
Wavelength	Multimode 850nm LED	Multimode 1300nm LED	Single Mode 1300nm LED
Connector	ST	ST	ST
Link Budget	-20 ± 1 dB	-20 ± 1 dB	-14 ± 1 dB
Operating Range	2km / 1.25mi / 6,600ft	8km / 5mi / 26,400ft	14km / 8.7mi / 46,000ft
Fiber Cable	50/125, 62.5/125, 100/140μM * <sup>2</sup>	50/125, 62.5/125, 100/140μM * <sup>2</sup>	8/125, 9/125, 10/125μM * <sup>3</sup>

Note: \*<sup>2</sup> Multimode tests performed on 62.5/125μM fiber cable. \*<sup>3</sup> Single Mode tests performed on 9/125μM fiber cable.

## Accessories

Model #	Description	Weight
HF-1	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)
HF-2	Dual card standalone enclosure. 7.1"W x 2.3"H x 11.6"L (18 x 5.9 x 29.5 cm)	0.7 kg (24 oz)
HF-2SS	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)
HF-20	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)
AC150W	Power supply / system monitor. Two recommended for redundancy. (Used with HF-20.)	1.2 kg (43 oz)
ADPHF01	Blank panel, single slot.	0.05 kg (2 oz)
ADPHF02	Blank panel, double slot.	0.09 kg (3 oz)
PSAC08	Power adapter, 110vac to 12vdc/1.0A, (US). (Used with HF-1, HF-2, and HF-2SS.)	0.4 kg (14 oz)
PSAC09	Power adapter, 220vac to 12vdc/1.0A, (VDE). (Used with HF-1, HF-2, and HF-2SS.)	0.4 kg (14 oz)

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