

FOM II Series - F22xxA RS-530 High Speed Fiber Optic Modem

Product Features

- RS-530, RS-422, RS-423 Standards
- MIL-STD-188-114 Standard
- Data Rate up to 10 Mbps
- Full-Duplex, Half-Duplex or Simplex Transmission
- LED Indicators for Instant System Monitoring
- Three available Housing Options
- Standalone or Rack Mount
- SFP fiber optic module technology



Product Description

VERSITRON FOM II Series High-Speed Fiber Optic Modems convert RS-530 copper signals to light providing the capability for extended communication distances as well as isolation between two RS-530 devices. These modems convert RS-530 data at speeds up to 10 Mbps (synchronous) or 100 Kbps (asynchronous). Signals are transmitted up to 2 km on multi-mode (MM) fiber cable or 20 km on single-mode (SM) fiber cable with fully transparent operation. The modems are switch selectable DCE or DTE, and support RS-530 (RS-422, RS-423) or MIL-STD-188-114 standards. They operate as two-channel multiplexer/modems. For high-speed synchronous operation, the first channel is used for data and the second is used for transmit clock. Both channels may be used for data in low-speed asynchronous operation, typically less than 100 Kbps. Operation modes include Automatic, Forced Asynchronous, or Forced Synchronous. LC fiber optic connectors are standard for all models.

In the automatic mode, F22xxA modems operate with a variable data rate from 20 Bps to 10 Mbps such as those found with high-speed telemetry systems. An internal bit-rate monitor selects the transmit-clock source. At clock rates under 100 KHz (or no clock), the Modems utilize an internal 10 Mhz reference for clocking. This assures a large number of samples for minimum end-to-end timing jitter. At clock frequencies over 100 KHz, the actual clock signal is used. In Forced Asynchronous modes the internal 10 Mhz reference is used. In Forced Synchronous modes the internal reference is disabled and the transmit-clock is used. The minimum data rate in this mode is 56 kbps. Local and remote modems can be set to operate in different modes permitting operation in one direction at 10 Mbps synchronous and 250 Bps asynchronous in the other direction.

Product Models

Model	Function	Data Rate	Connector	Fiber Cable	Wavelength	Max Distance
F2238A	RS-530 Fiber Optic Modem	250bps - 10 Mbps	LC	MM	850nm	2 km
F2245A	RS-530 Fiber Optic Modem	250bps - 10 Mbps	LC	SM	1310nm	20 km*

*Distances to 120 km are available. Please call for details.

FOM II Series - F22xxA

RS-530 High Speed Fiber Optic Modem

General Specifications:

Dimensions	7 x 0.9 x 11.75in / 17.8 x 2.3 x 19.9cm (WxHxL)
Weight	0.37 kg (13 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 (non-condensing)
Altitude	Up to 10,000 ft



Electrical Interface:

Power Requirements	12VDC, 1.5Amp
Electrical Connector	DB25 Female
Data Rate	56 kbps to 10 Mbps (Synchronous) 20 bps to 100 Kbps (Asynchronous)
Operation	Full-Duplex, Half-Duplex, Simplex
Error Rate	Better than 10 ⁻⁹
Digital Interface	RS-530 (RS-422, RS-423) synchronous or asynchronous MIL-STD-188-114 (balanced)

Accessories:

Model	Description
HF-1	Single Card Enclosure
HF-2SS	2-Slot 19" Rack-Mount Chassis
HF-20A	20-Slot 19" Rack-Mount Chassis
AC300WR	Redundant Power Supply / System Monitor for HF-20A Chassis
PSAC08	110VAC to 12VDC Power Adapter
PSAC09	220VAC to 12VDC Power Adapter
ADPHF01	Single-Slot Blank Panel for HF-2SS or HF-20A Chassis
ADPHF02	Double-Slot Blank Panel for HF-20A Chassis

