

FOM II Series - F22xx

RS-530 High Speed Fiber Optic Modem

Product Features

- RS-530, RS-422, RS-423 Standards
- MIL-STD-188-144 Standard
- Data Rate up to 10 Mbps
- Full-Duplex, Half-Duplex or Simplex Transmission
- Transmit up to 15km
- LED Indicators for Instant System Monitoring
- Three available Housing Options
- Standalone or Rack Mount



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 6 Km on multimode (MM) fiber cable or 15 Km on single mode (SM) fiber cable with fully transparent operation. The modems are data communications equipment (DCE) 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. ST fiber optic connectors are standard for all models.

In Automatic modes, F22xx modems operate with a variable data rate from 250 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 regardless of the data rate. 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
F2238	RS-530 Fiber Optic Modem	250bps - 10 Mbps	ST	MM	850nm	2 km
F2240	RS-530 Fiber Optic Modem	250bps - 10 Mbps	ST	MM	1310nm	8 km
F2245	RS-530 Fiber Optic Modem	250bps - 10 Mbps	ST	SM	1310nm	15 km

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Technical Specifications

General Specifications:

Dimensions	7 x 0.9 x 11.75in / 17.8 x 2.3 x 19.9cm (HxWxL)
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	DB15 Female
Data Rate	250 bps to 10 Mbps (Synchronous) 250 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 or unbalanced)

Accessories:

Model	Description
HF-1	Single Card Enclosure
HF-2SS	2-Slot 19" Rack-Mount Chassis
HF-20A	20-Slot 19" Rack-Mount Chassis
AC300W	Power Supply / System Monitor for HF-20A 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