

FOM II Series - F290x / F293x Fiber Optic Isolators

Product Features

- RS-232, RS-422, RS-423, RS-449, RS-530, MIL-STD-188-114, TTL & NRZ
- Data Rate up to 10 Mbps
- Simplex Transmission
- Transmit up to 30 km
- Terminal Timing
- LED Indicators for Instant System Monitoring
- Three available Housing Options
- Standalone or Rack Mount



Product Description

VERSITRON FOM II Series Fiber Optic Isolators are transmitters and receivers designed to transmit simplex information channels over a pair of fiber optic cables. F290x and F293x Isolators fully support the interface control signals associated with RS-232, RS-422, RS-423, RS-449, RS-530, MIL-STD-188-114 balanced / unbalanced, TTL and NRZ standards. These Isolators support data rates from 50Bps to 10Mbps for Balanced and 50Bps to 100Kbps for Unbalanced signals. Using both channels the unit may be configured as one synchronous data and one clock circuit or as dual asynchronous data channels. ST fiber optic connectors are standard for all models.

There are four status indicators on the F290x Transmitter: DC power ON (PWR), Alarm (loss of signal) (ALM), Transmit Ch. 1 (TXC1), and Transmit Ch. 2 (TXC2). There are also four status indicators for the F293x Receiver: DC power ON (PWR), Alarm (loss of signal) (ALM), Receiver Ch. 1 (RXC1), and Receive Ch. 2 (RXC2). No audible alarm is available. The F290x provides two dedicated simplex channels each independently handling a digital clock or data signal. Transmission of Balanced or Unbalanced signals is user selectable by jumpers. Control signals are processed in a similar manner. Inputs are converted to TTL (+5V or Ground) prior to input to the optic modules. The optic modules convert the TTL digital data stream to light and provide the connection to the fiber optic cable. The F293x provides the inverse process of the transmitter enabling a transparent path or signal translation (balanced to unbalanced or vice versa) if required.

Product Models

Model	Function	Data Rate	Connector	Fiber Cable	Wavelength	Max Distance
F2902	Fiber Optic Transmitter	Up to 10 Mbps	ST	MM	850nm	6 km
F2905	Fiber Optic Transmitter	Up to 10 Mbps	ST	SM	1310nm	30 km
F2932	Fiber Optic Receiver	Up to 10 Mbps	ST	MM	850nm	6 km
F2935	Fiber Optic Receiver	Up to 10 Mbps	ST	SM	1310nm	30 km

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General Specifications:

Dimensions	11.75 x 7 x 0.845in / 29.85 x 17.8 x 2.1cm (LxWxH)
Weight	0.34 kg (12 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, 1.0Amp
Copper Interface Connector	DB25
Format	RS-232, RS-422, RS-423, RS-449, RS-530 / MIL-STD-188-114, TTL & NRZ
Protocol	Asynchronous/Serial
Operation	Simplex
Balanced Data Rate	50 bps - 10 Mbps
Unbalanced Data Rate	50 bps - 100 Kbps
Error Rate	Better than 10 ⁻⁹

Fiber Interface:

Fiber Interface Connector	ST
Fiber Cable	Multi-Mode: 62.5/125 Single-Mode: 9/125
Link Margin	20dB

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

