

One TTL Data Channel**FEATURES:**

- Surface Mount Technology (SMT) for High Reliability and Repeatability
- Hot Swappable Cards
- Laser Based Back-Biased Photo Detection Circuitry for Stable Optical Output Over Full Temperature Range(Single-mode)
- ST™, FC Optical Connector
- DC to 300Kb/s Data Rate
- Frequency Modulated (FM) Transmission
- SpectraSmart™ Compatible
- Meets NEMA TS1/TS2 and Caltrans Specifications
- LED Status Indicators Provide Rapid Indication of Critical Operating Parameters
- Automatically Resettable Solid-State Current Limiter on All Power Lines: Provides Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Required

DESCRIPTION:

The PT/PR-160R-7-x is a Frequency Modulated (FM) state-of-the-art fiber optic system that transmits and receives TTL Data signal over one multimode or single-mode fiber. Signal is seamlessly transmitted distances of up to 6Km (multimode) and 100 Km (singlemode). The capabilities of the Model PT/PR-160R-7-x are enhanced by its compatibility with Meridian's PC based SpectraSmart™ Network Management and Diagnostic software system. SpectraSmart™ supervises the operating parameters of the transmission system such as status on video levels, sync, FM carrier detect, voltage, temperature, optical levels, etc., and external equipment which are attached to the Meridian equipment. See the SpectraSmart™ brochure for more details.

CONFIGURATIONS:

The PT/PR-160R-7-x is available as rack mount cards that can be installed in all of Meridian's card chassis and 19" racking frames. The PT/PR-160R-7-x can be converted to module by installing it in the SR-500 card chassis. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. This product requires no user adjustments and features superior quality and performance.

APPLICATIONS:

Security and Surveillance
Distance Learning

SPECIFICATIONS:

Data

Formats. TTL Data
Rate. DC to 300 Kb/s
Bit Error Rate. 10^{-9} *

Connectors

Data. DE-15 Female with
Jack Screw Standoffs (0.232" H)
Optical. ST™, FC, FCPC, SC
Power. 2 pin Terminal Block

Power**

Card. 2.5 W
Module. 100 mA @ 24 VAC,
Adapter for SR-500/S. Model WP-24

Indicators (LEDs)

Green. Data Activity
Red. Power On

Physical

Dimensions:
Module (w/SR-500). 181 mm (7.15") L, 24 mm (.95") W
. 132 mm (5.20") H
Card. 160 mm (6.3") L, 20mm (0.8") W
. 100 mm (4") H
Weight:
Module (w/SR-500). 900 g (32 oz.)
Card. 450 g (16 oz.)
Number of Rack Slots. One

Environmental

Operating Temperature. . . . -40°C to +74°C
Storage Temperature. -55°C to +85°C
Relative Humidity. 0 to 95% Non-condensing

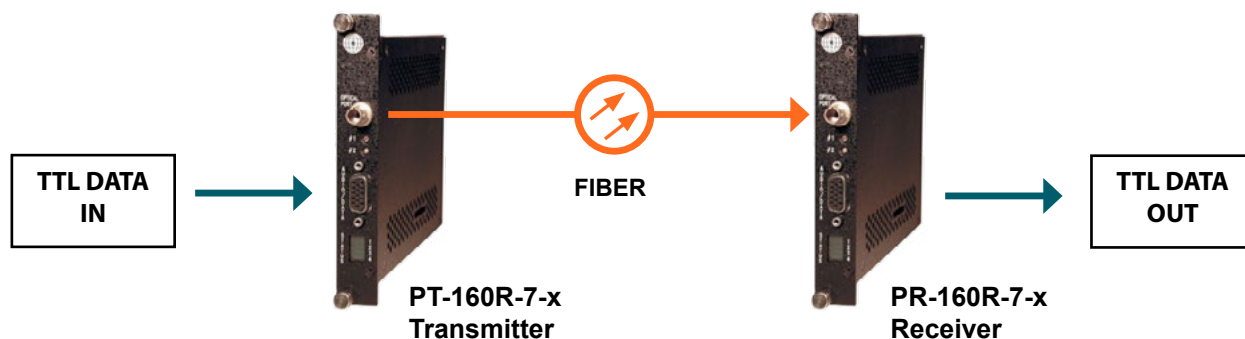
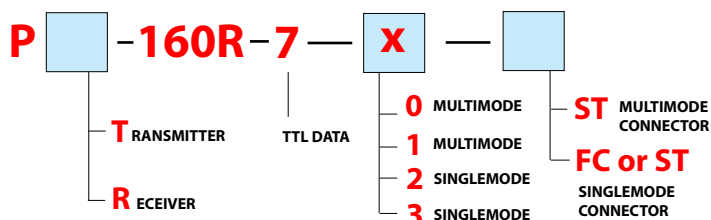
Quality

MTBF. >210,000 hours @ Ground Fix
. 35°C per MIL217F

* Measured @ 1Km (multimode), @ 10Km (singlemode)
** Due to variations of drivers and diagnostic options power shown at maximum measurements

Part Numbers:

PT-160R-7-0 ..Transmitter, 850nm, MM, Laser
PT-160R-7-1 ..Transmitter, 1300nm, MM, Laser
PT-160R-7-2 ..Transmitter, 1310nm, SM, Laser
PT-160R-7-3 ..Transmitter, 1550nm, SM, Laser
PR-160R-7-1 ..Receiver, 1550nm, MM, Laser
PR-160R-7-1 ..Transmitter, 1300nm, MM, Laser
PR-160R-7-2 ..Transmitter, 1310nm, SM, Laser
PR-160R-7-3 ..Transmitter, 1550nm, SM, Laser



OPTICAL:

Meridian Fiber Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
0	Multimode (SLED) 62.5 / 125	-13	-34	21 **	850	ST	39
1	Multimode (SLED) 62.5 / 125	-16	-34	18 **	1300	ST	39
2	Singlemode (Laser) 9 / 125	-7 ***	-36	29	1310	ST, FC	41
3	Singlemode (Laser) 9 / 125	-10 ***	-36	26	1550	ST, FC	41

* Distance is limited to fiber loss, splices and fiber bandwidth
** For 50/125um fiber, subtract 3dB
*** Higher output lasers available

Meridian Technologies Inc.

700 Elmont Road. • Elmont, NY 11003 • phone 516. 285. 1000 • fax 516. 285. 6300 •
sales@meridian-tech.com • www.meridian-tech.com

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