

Terrapin FTR-D6

3 Gb/s Fiber Transceiver with Integral Six Output Distribution Amplifier



Lightweight, easy-to-deploy fiber connectivity solutions.

The Terrapin FTR-D6 from Grass Valley, a Belden Brand, combines the features of a fiber optic digital video transmitter, receiver and a six output digital video distribution amplifier, providing unprecedented flexibility for any application where video must be simultaneously transmitted, received and viewed, from 19 Mb/s to 3 Gb/s.

The compact transceiver transparently handles the entire range of digital video rates while maintaining the signal quality that broadcasters demand. No matter what the format, the Terrapin FTR-D6 allows you to transport and view:

- 3 Gb/s HD-SDI SMPTE 424M (reclocked)
- 1.5 Gb/s HD-SDI SMPTE 292M (reclocked)
- 540 Mb/s SMPTE 344M
- 270 Mb/s DVB/ASI (reclocked)
- 143 Mb/s SMPTE 259M
- 19.4 Mb/s ATSC: SMPTE 310M
- AES and MADI audio
- Non-standard digital signals to 3 Gb/s

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KEY FEATURES

- Fiber optic transmitter and receiver (transceiver)
- Integral 6-output digital distribution amplifier
- 4 user-selectable optical/electrical modes
- Intuitive LED indications and signal flow arrows
- Easy-to-read optical power meter for instant troubleshooting
- Mode setting stored in non-volatile memory
- Error-free pathological
- Standard formats internally reclocked: 270 Mb/s, 1.5 Gb/s and 3 Gb/s
- Modular, flexible design
- Very low system jitter
- >10 dB return loss at 3 GHz
- 19.4 Mb/s to 3 Gb/s
- Compatible with SMPTE 310M, 292M, 259M, 297M, 424M
- Up to 50 km (31 mi.) distance
- Cool, efficient, reliable
- Intuitive LED indicators show:
 - Power
 - HD-SDI data presence
 - Signal paths
 - Rx optical power levels
- Supports embedded audio
- Durable, reliable, serviceable

SPECIFICATIONS

Transmission

Operating wavelength: 1310, or 1270-1610 (CWDM)
Coaxial video connectors I/O: BNC
Optical connectors (2): ST
Optical source laser diode: FP or CWDM DFB
Optical detector: PIN-TIA diode
Optical output power: -7 dBm
Receiver sensitivity: -20 dBm at 3 Gb/s
Link margin/ distance: 13 dB min
Fiber type: Single-mode

Video

Transmission method: Digital
Input level: 800 mV p-p
Input impedance: 75Ω
Coax equalization: At 2.97 Gb/s 100m (328 ft.)
Output impedance: 75Ω (6X)
Bit-error rate: -20 dBm at 3 Gb/s
Jitter (pathological data pattern): <0.2 UI
Rise/fall times: <120 ps at 3 Gb/s

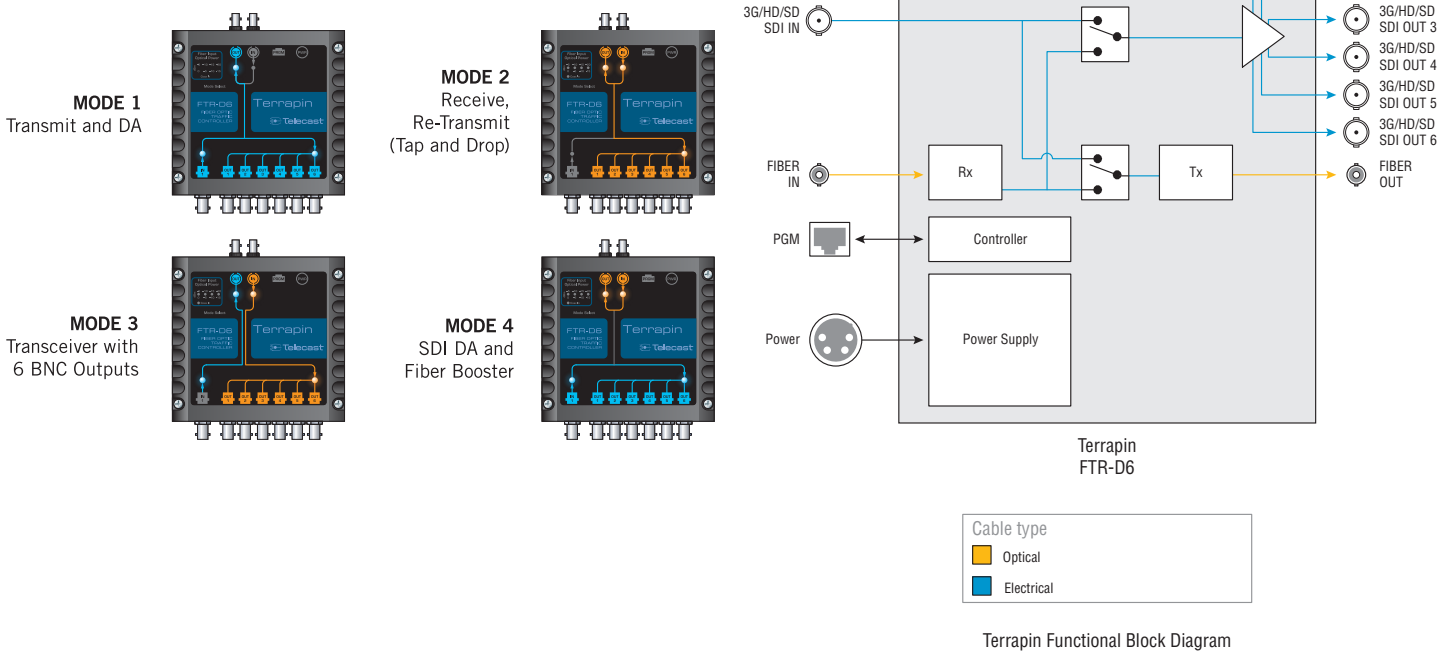
Mechanical/Environmental

Dimensions (W x H x D): 157.48 x 43.18 x 149.86 mm (6.2 x 1.7 x 5.9 in.)
Weight, each end: 0.41 kg (14.4 oz.)
Input voltage: 9-18 VDC
Power connector plug: 2.5 mm circular (locking)
Power consumption (typ.): 4.4W
Indicators: Power, signal, link, optical power
Temperature range: Operating -25° to 55° C (-13° to 131° F)
Humidity range: 0 to 95% RH, non-condensing
Certifications: FCC Part 15, RoHS, LEED, CE

ORDERING

TRPN-FTR-D6-S2-13
 ADAP-AC-04

Terrapin model FTR-D6 fiber optic transceiver with 6-output D.A., 2 ST connectors, 1310 nm*
 120 VAC to 12 VDC adapter, circular locking connector (US)



GVB-1-0445A-EN-DS

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