

SCORPION Compatible SFPs

1G/3G/12G Electrical and Optical SFPs

The Evertz SCORPION compatible SFPs are used in the SCORPION-X18, -4 and -2 Transport platform. Depending on the model, these SFP's have electrical or optical interfaces supporting up to 12G video.

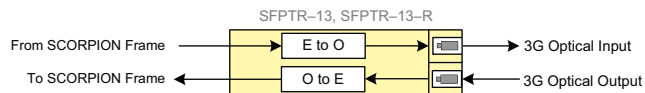
The optical SFP's provide dark fiber transport of Video (12G/4K/3G/HD/SD-SDI/DVB-ASI, HDMI), Audio (Analog Audio, AES Audio, MADI, Intercom), Ethernet (10/100/1000/10G Ethernet) and Data (USB, Serial Data RS-232/422/485). The electrical SFP's provide connections of signals to and from the SCORPION platform.



Optical SFP's

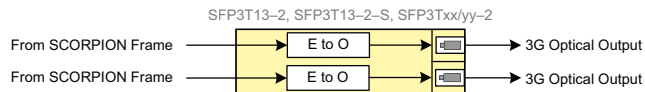
SFPTR-13, SFPTR-13-R

3Gig Optical reclocked or non-reclocked transceiver with standard 1310nm laser.



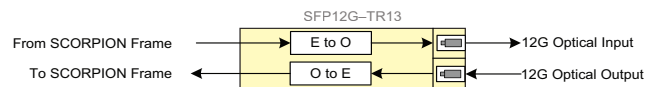
SFP3T13-2, SFP3T13-2-S, SFP3Txx/yy-2

Dual 3Gig Optical non-reclocked transmitter with standard 1310nm, low power 1310nm or CWDM laser.



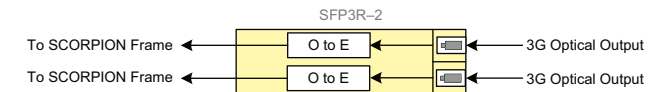
SFP12G-TR13

12Gig Optical reclocked transceiver with standard 1310nm laser.



SFP3R-2

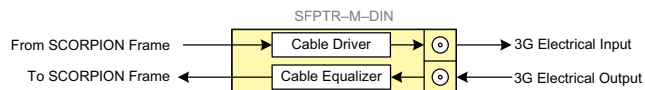
Dual 3Gig Optical non-reclocked receiver with standard sensitivity receiver.



Electrical SFP's

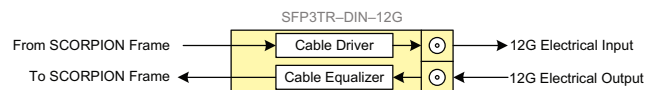
SFPTR-M-DIN

3Gig Electrical non-reclocked transceiver with DIN 1.0/2.3 connectors.



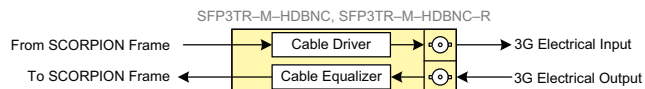
SFP3TR-DIN-12G

12Gig Electrical reclocked transceiver with DIN 1.0/2.3 connectors.



SFP3TR-M-HDBNC, SFP3TR-M-HDBNC-R

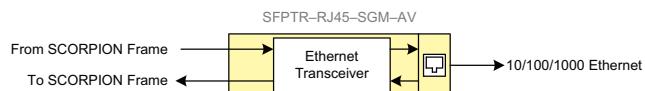
3Gig Electrical reclocked or non-reclocked transceiver with HD-BNC connectors.



Ethernet SFP's

SFPTR-RJ45-SGM-AV

Single 10/100/1Gbps RJ-45 SFP Module.



Specifications

Optical Outputs:

Number of signals: Up to 2x per SFP
 Connector: LC/UPC
 Fiber: Single mode
 Optical Power:
 1310nm (3G SFP): -2dBm ±1dBm
 1310nm (12G SFP): -2dBm ±1dBm
 -S (Short Haul 1310nm 3G SFP):
 -7dBm ±1dBm
 CWDM (3G SFP): +4dBm ±1dBm
 Wavelength:
 Standard (3G & 12G SFP):
 1310nm
 CWDM (3G SFP): 1270-1610nm
 ITU-T G.694.2 compliant

Optical Input:

Number of signals: Up to 2 per SFP
 Connector: LC/UPC
 Fiber: Single mode
 Operating Wavelength: 1270-1610nm
 Max Input Power:
 Standard (3G & 12G SFP): -1dBm
 Optical Sensitivity:
 Standard (3G SFP): -21dBm at 2.97Gbps
 Pathological Level A
 -23dBm at 2.97Gbps Color Bars
 Standard (12G SFP): -16dBm at 12Gbps

Electrical Inputs:

Reclocked Standards: SMPTE ST 2081,
 SMPTE ST 2081 (12G-SDI),
 SMPTE ST 424M (3Gb/s),
 SMPTE ST 292M (1.5Gb/s),
 SMPTE ST 259M (270Mb/s),
 DVB-ASI
 Connector: DIN 1.0/2.3
 HD-BNC
 Impedance: 75Ω (nominal)
 Equalization: Automatic to 80m @3Gb/s,
 100m @1.5Gb/s, 250m @270Mb/s
 (with Belden 1694A or
 equivalent cable)
 Return Loss: > 15dB up to 1.5GHz,
 > 10dB up to 3GHz,
 > 7dB up to 6GHz,
 > 4dB up to 12GHz

Electrical Outputs:

Connector: DIN 1.0/2.3
 HD-BNC
 Impedance: 75Ω (nominal)
 Signal Level: 800mV (nominal)
 DC Offset: 0V ±0.5V
 Rise and Fall Time (Reclocked SFPs only):
 12G: < 45ps
 HD/3G: < 135ps
 SD: < 900ps

Overshoot (Reclocked SFPs only):

< 10% of amplitude
 Alignment Jitter (Reclocked SFPs only):
 < 0.2UI to 1.485Gb/s
 < 0.3UI to 2.97Gb/s
 < 0.3UI up to 12Gb/s

Ethernet Input/Output

Standard: IEEE 802.3 (10 BaseT),
 IEEE 802.3u (100 BaseTX),
 IEEE 802.3ab (1000BaseTX)
 Number of Ports: 1
 Connector: RJ-45
 Cable requirements:
 10 BaseT: UTP category 3, 4, or 5 cable
 up to 328ft/100m
 100 Base Tx: UTP category 5 cable up
 to 328ft/100m
 1000Base Tx: UTP category 5 cable up
 to 164/50m

Physical:

SFP Form-factor

Ordering Information

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|--------------------------|--|
| SFPTR-13 | SFP Optical Non-reclocked Transceiver, 3Gb/s, 1310nm, SMF |
| SFPTR-13-R | SFP Optical Reclocked Transceiver, 3Gb/s, 1310nm, SMF |
| SFP12G-TR13 | SFP Optical Reclocked Transceiver, 12Gb/s, 1310nm, SMF |
| SFP3TR-M-DIN | SFP Electrical Non-reclocked Transceiver, 12Gb/s, DIN 1.0/2.3 |
| SFP3TR-DIN-12G | SFP Electrical Transceiver, 12Gb/s, DIN 1.0/2.3 |
| SFPTR-M-HDBNC | SFP Electrical Non-reclocked Transceiver, 12Gb/s, HD-BNC |
| SFPTR-M-HDBNC-R | SFP Electrical Reclocked Transceiver, 12Gb/s, HD-BNC |
| SFP3T13-2 | SFP Dual Optical Non-reclocked Transmitter, 3Gb/s, 1310nm, SMF |
| SFP3T13-2-S | SFP Dual Optical Non-reclocked Transmitter, 3Gb/s, short haul 1310nm, SMF |
| SFP3Txx/yy-2 | SFP Dual Optical Non-reclocked Transmitter, 3Gb/s, CWDM, SMF |
| SFP3R-2 | SFP Dual Optical Non-reclocked Receiver, 3Gb/s, standard sensitivity, SMF |
| SFPTR-RJ45-SGM-AV | Single 10/100/1Gbps RJ-45 SFP Module |

Enclosures:

| | |
|---------------------------|---|
| SCORPION-X18 | Media Processing Platform Multi-Frame with onboard 80x80 crosspoint (holds 18 modules) |
| SCORPION-X18-48VDC | Media Processing Platform Multi-Frame with onboard 80x80 crosspoint (holds 18 modules) |
| SCORPION-4 | Media Processing Platform — Standalone Frame (holds 4 modules) |
| SCORPION-2 | Media Processing Platform — Miniature Frame (holds 2 modules) |