

TR2 Dual SDI/HD-SDI (1.5G / 3G) to Fibre Singlemode Tx/Rx

The TR2 is designed to offer a wide range of options, allowing for dual channel transmitter, dual channel receiver or single channel transceiver versions. The TR2 will pass both HD-SDI (1.5 Gbps and/or 3G) or SDI (270Mbps) signals in standard openGear rack frames and can be mixed freely with analogue or digital video or audio modules. This feature allows system designers to introduce HD-SDI as demand develops and provides fully integrated solutions for the transmission of video and audio signals

over distances that cannot be accomplished using conventional copper co-axial cable. Up to 75 km of fibre can be driven when used with HD-SDI (1.5G) and up to 33km can be driven with HD-SDI (3G) signals. A distance of 100km is possible with SDI signals when using 1550nm lasers (see distance table below). The module can be supplied in either 1310nm or 1550nm versions. Other frequencies between 1470nm and 1610nm can be supplied for CWDM applications.

Features

- HD-SDI (1.5G and 3G Versions)/SD-SDI
- Dual channel transmitter version (/TT option)
- Dual channel receiver version (/RR option)
- Single channel transceiver version (/TR option)
- 1310 or 1550nm versions (other wave lengths to order)
- Different wavelengths can be mixed on one module
- Both SDI & HD-SDI (1.5G and 3G) can be mixed in the same frame with other openGear series modules

Specifications

TR2 SERIAL INPUTS (up to 2)

Format Compatible with SMPTE 292M, 259M

Reclocking on inputs

Connector BNC

Impedance 75ohms

Data Rates 143Mbps, 177Mbps, 270Mbps, 360Mbps, 540Mbps, 1.485Gbps, 2.98Gbps

Also accepts AES/EBU digital audio streams

Amplitude 800mV p-p (terminated)

D.C. Offset 0V +/-0.5V

Controls Status monitoring only

TR2 OPTICAL INPUTS (up to 2)

Connector LC with shutter

Optical Wavelength range 1270nm to 1610nm

Optical Power input range -23dBm to -1dBm (Typical)

Recommended Cable Single-Mode

TR2 OPTICAL OUTPUTS (up to 2)

Connector LC with shutter

Laser FP or DFB

Optical Wavelength 1310nm or 1550nm

Optical Power Output 2 user selectable options:
 @ 1310nm -5/-2/+1dBm (Typical)
 @ 1610nm +1dBm (Typical)

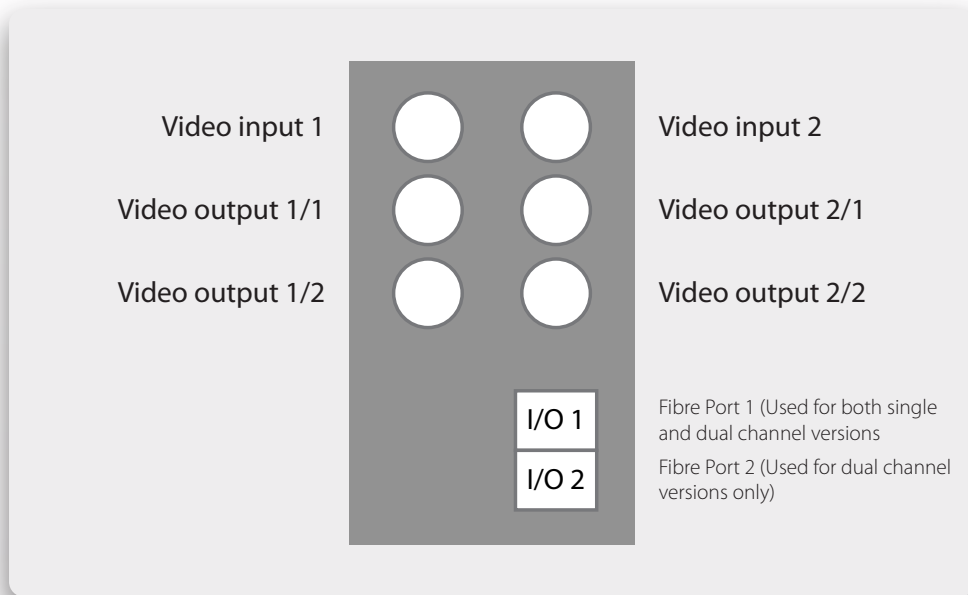
TR2 SERIAL OUTPUTS (up to 2)

Connector BNC

Reclocking on all outputs.

Impedance 75 ohms

Transmitter	Receiver	Data Rate	Link Distance (Min)
1310nm	PIN	2.97Gbps	5km
		1485Mbps	10km
		270Mbps	15km
1550nm	PIN	2.97Gbps	33km
		1485Mbps	55km
		270Mbps	65km
	APD	2.97Gbps	33km
		1485Mbps	75km
		270Mbps	100km



Ordering Information

TR2/RR Two Channel Receiver

TR2/R Single Channel Receiver

TR2/TR/13 Single Channel Receiver/Transmitter @ 1310nm

TR2/TR/15 Single Channel Receiver/Transmitter @ 1550nm

TR2/TT/13/13 Two Channel Transmitter, Both Channels @ 1310nm

TR2/TT/13/15 Two Channel Transmitter, One Channel @ 1310nm, Other Channel @ 1550nm

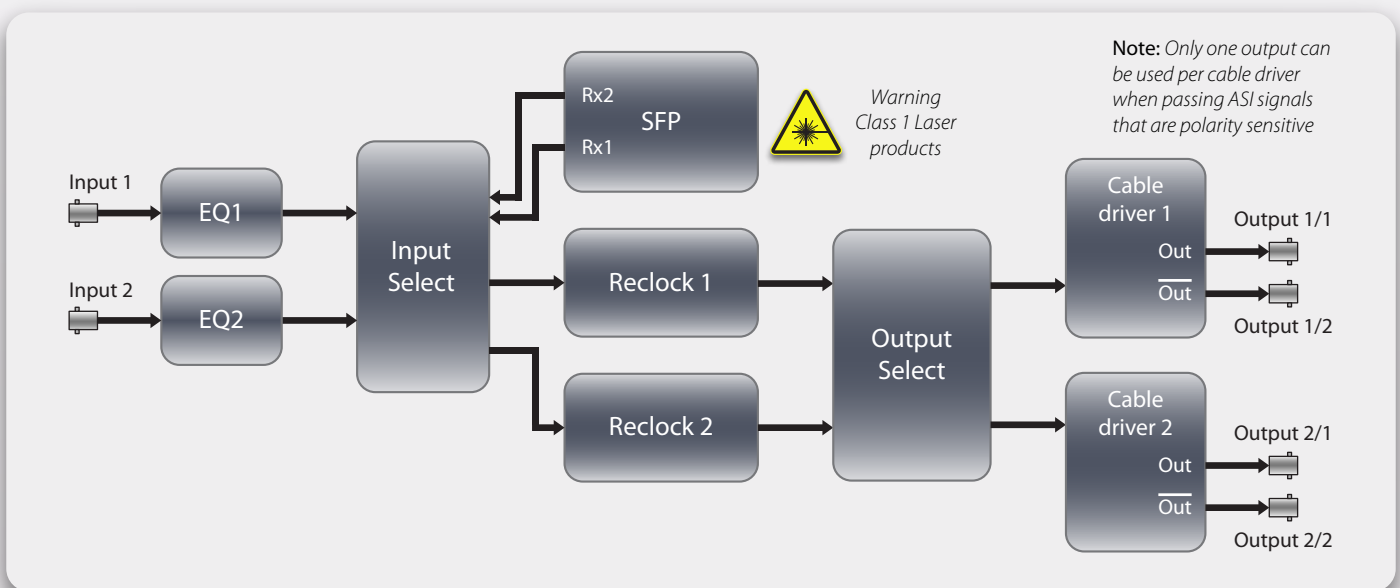
TR2/TT/15/15 Two Channel Transmitter, Both Channels @ 1550nm

TR2/T/13 Single Channel Transmitter, @ 1310nm

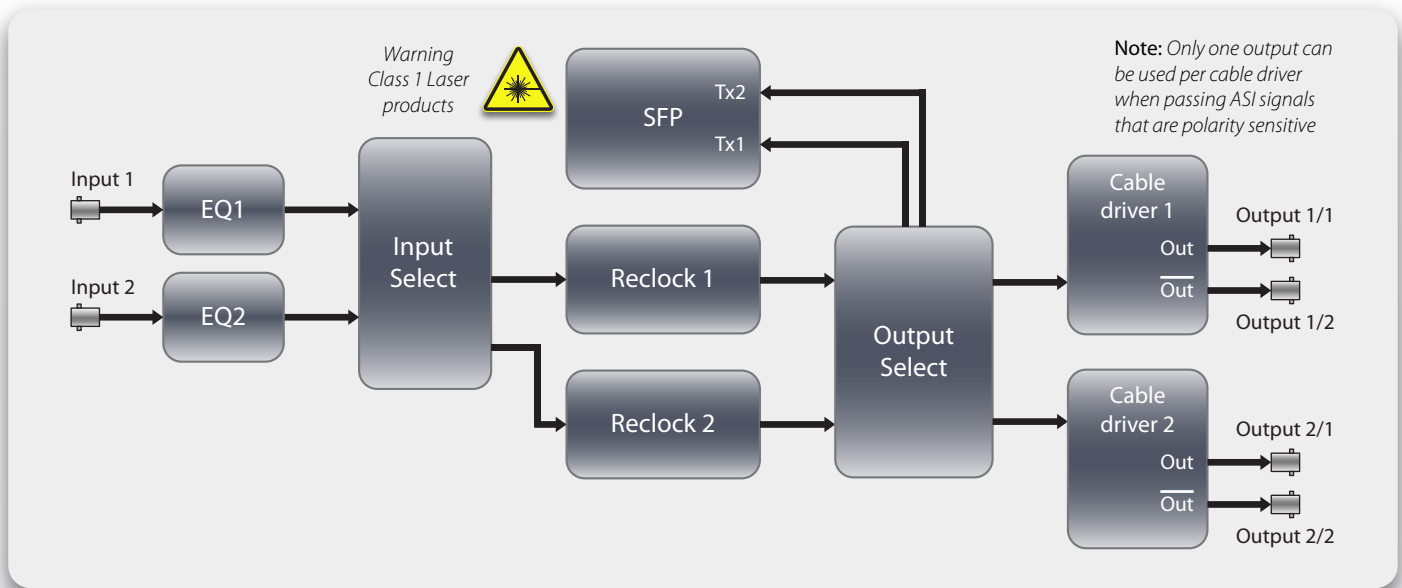
TR2/T/15 Single Channel Transmitter, @ 1550nm

RM-Fibre-A Rear

Receiver Mode



Transmit Mode



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