

# OTR 5444

12G / 3G / HD

12G SERIES 5000

CardModules

## 12G SDI Quad Fiber Transceiver

### Description

The OTR 5444 is a quad-channel bi-directional SDI/Fiber Transceiver module suitable for SDI video signals up to 12Gbit/s. It has four independent channels with automatic input clock rate and signal presence detection.

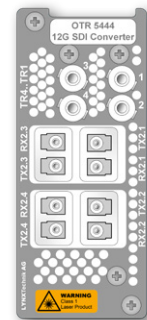
This module is ideally suited for demanding high-quality broadcast and professional video applications. It consists of four bi-directional 12G SDI high-density micro BNC electrical interfaces, which allows the user to set the direction of the signal flow. It also consists of four 12G SDI optical inputs and four 12G SDI optical outputs arranged in the optical TR slots.

Designed for the use in SERIES 5000, OTR 5444 is part of CardModules, which offers high quality, modularity and flexibility in a small form factor ideal for applications where space is at a premium. Like other 5000 series CardModules, this module is fully integrated into the LYNX APPolo Control system, which provides remote control, status monitoring and error reporting for the module.

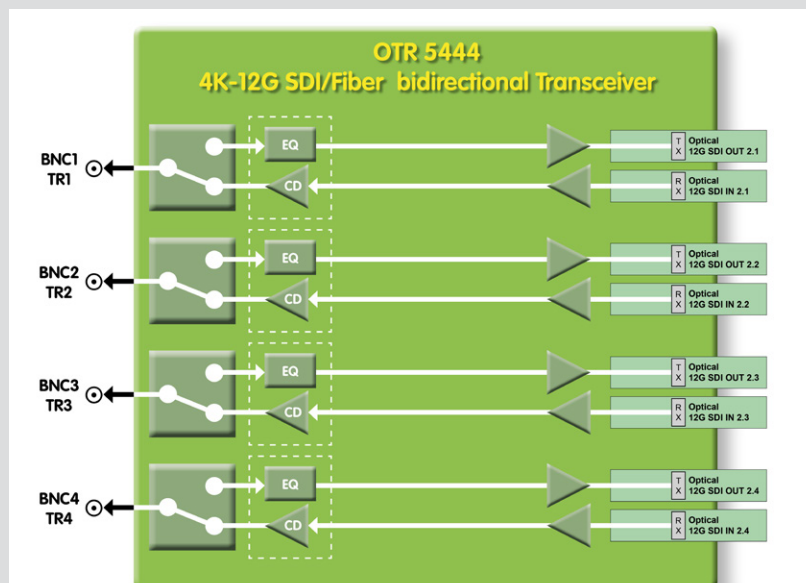
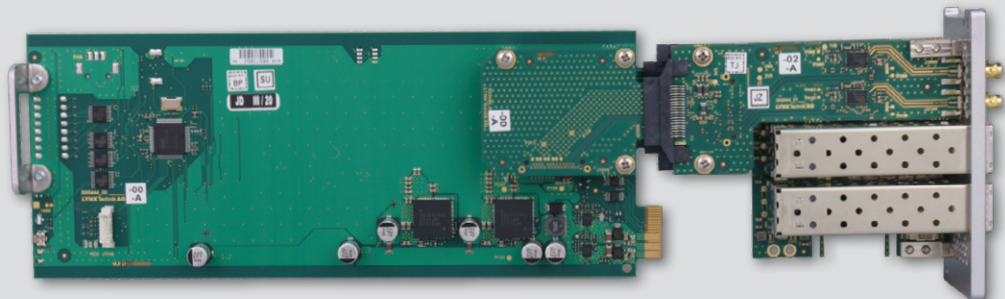
**Note:** A maximum of 8 OTR 5444 cards can be installed in RFR 5018 rack frame. It CANNOT be fitted into slot 1 or 2 as it would block the RFR internal cross flow fan at the rear.

### Features

- Bi-directional electrical to optical and optical to electrical conversion up to 12GSDI
- Four independent 12G SDI Channels (8K quad-channel optical <-> electrical conversion)
- 4 x Optical Transceivers (TR)
- 4 x High-density BNCs (TR)
- Incoming and outgoing 12G SDI signals are relocked.
- Input presence detection with LED indication
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control, status monitoring and error reporting when used with LYNX Appolo Control System
- Hot swappable



Backplane



## 12G SDI Quad Fiber Transceiver

## CardModules

### Specifications

#### Video Input (Fiber)

Signal type	SMPTE 297M-2006 SMPTE 292M, 424M, 2082-1
Supported formats	SDI formats up to 12Gbit/s* (see table)
No. of inputs	4 x Receiver (Optional: OH-TR-12G-LC or OH-RX-12G-LC)
Connector	LC/PC (single mode)
Wavelength	1260nm – 1620nm (-14dBm sensitivity)

#### Video Input (microBNC)

Signal Type	SMPTE 292M, SMPTE 424M, SMPTE 2081-1, SMPTE 2082-1
No. of inputs	4 x bi-directional micro BNC port
Return Loss	>4dB up to 12 Gbit/s >10dB up to 3 Gbit/s

#### Video Outputs (Fiber)

Signal Type	SMPTE 297M-2006 SMPTE 292M, 424M, 259M, 2082-1
No. of outputs	4 x Transmitter (Optional: OH-TR-12G-LC or OH-TX-12G-LC)
Connector	LC/PC (single mode transmit/receive – duplex connection)
Wavelength	Standard: 1310nm (non-CWDM)
Transmission power	Standard: 1310nm (non-CWDM): -5dBm typ.

#### Video Outputs (MicroBNC)

Signal Type	SMPTE 2082-1, SMPTE 2081-1 SMPTE 424M, SMPTE 297M-2006, SMPTE 292M SMPTE 259M
No. of outputs	4 x bi-directional microBNC port
Return Loss	>4dB up to 12 Gbit/s >10dB up to 3 Gbit/s

#### Performance

Cable equalization	Up to 150m using Belden 1694A (1.485Gbit) Up to 120m using Belden 1694A (2.97Gbit) Up to 50m using Belden 4794R (11.88Gbit)
Control	Remote control possible when used with LYNX controller
Status monitoring (LED)	Signal presence (each input channel) plus general alarm

#### Electrical Specifications

Operating voltage	+12 VDC
Power consumption	17W including optional Fiber SFPs
Safety	IEC 60950/ EN 60950/VDE 0805

#### Mechanical

Size	283mm x 78mm
Weight	Card/Module 120g, connector plate 100g

#### Ambient\*

Temperature	5°C to 40°C (41°F - 104°F) maintaining specifications
Humidity	90% maximum, non-condensing

\* It is strongly recommended to operate OTR 5444 in a Series 5000 Rack with front panel fans and to keep the front panel closed during operation. This will avoid any signal error caused due to overheating in OTR 5444.

**Note:** A maximum of 8 OTR 5444 cards can be installed in RFR 5018 rack frame. It CANNOT be fitted into slot 1 or 2 as it would block the RFR internal cross flow fan at the rear.

### Settings and Control

#### Control

Remote control	Full remote control and status monitoring supported with the APPolo control system Supported Version: APPolo 8.12.0 or above
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#### On Board Indicators / LEDs

Input Port status	8 x LED
Master status	1 x LED
Power status	2 x LED

#### Supported Video Standards

Formats : 1.5 Gbit	720p / 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 Hz 1080i / 60 / 59.94 / 50 Hz 1080p / 30 / 29.97 / 25 / 24 / 23.98 Hz 1080psF / 25 / 24 / 23.98 Hz
Formats : 3.0 Gbit	1080p / 60 / 59.94 / 50 Hz
Formats : 12.0 Gbit	2160p / 60 / 59.94 / 50 Hz

#### SFP Module Selection

Model #	TX Power (dBm)	RX Sensitivity (dBm)	EAN #
<b>SDI Fiber Transceiver Options</b>			
OH-TR-12-LC	-5	-10	4250479325029
<b>CWDM SDI Fiber Transceiver Options</b>			
OH-TR-12G-1270-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326552
OH-TR-12G-1290-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326569
OH-TR-12G-1310-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326576
OH-TR-12G-1330-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326583
OH-TR-12G-1350-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326682
OH-TR-12G-1370-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326699
OH-TR-12G-1390-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326705
OH-TR-12G-1410-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326712
OH-TR-12G-1430-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326729
OH-TR-12G-1450-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326736
OH-TR-12G-1470-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326743
OH-TR-12G-1490-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326750
OH-TR-12G-1510-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326767
OH-TR-12G-1530-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326774
OH-TR-12G-1550-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326781
OH-TR-12G-1570-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326798
OH-TR-12G-1590-LC	-2...+3	-10 (6G,12G) -14 (1.5G,3G)	4250479326804

### Ordering Information

Model #	EAN #	Description	Includes
OTR 5444	4250479327801	4K-12 SDI Quad Fiber Transceiver	CardModule, Rear Termination Panel and Mounting Screws

Specifications subject to change