# 9404-EO • 4K/3G/HD/SD-SDI/ASI/MADI Quad-Channel Fiber Optic Transmitters with 4 BNC In/4 Fiber Out 4x4 Router



The 9400-series Coax/Fiber transport cards provide a card-based solution for high-density distribution and multiplexing between discrete coaxial ("BNC") signals (such as 3G/HD/SD-SDI, ASI, and MADI) and fiber buses. Utilizing the openGear<sup>®</sup> open-architecture platform, the 9400-series offers scalable incorporation and the easy-to-use DashBoard<sup>™</sup> setup and control operator interface.

The 9400-series cards offer I/O crosspoints, allowing easy to configure and flexible routing between card inputs and outputs. Up to 10 of any 9400-series cards can be installed in our 20-Slot frame, offering support for up to 40 BNC input/outputs and 40 fiber input/outputs in a single frame. In addition to SDI support, the cards support a wide range of signals/standards from 5 Mb/s to 3 Gb/s. The scalability of the 9400-series offers a high degree of flexibility and density, maximizing economy of both space and costs. Full user remote and card-edge monitor/control allows full card status and control access locally or across a standard Ethernet network.

BNC-to-Fiber (EO)	
9404-E0	4 BNC In x 4 Fiber Out; 4x4 Router; 1310 nm
9404-EO-CWDM	4 BNC In x 4 Fiber Out; 4x4 Router; CWDM
9404-EO-CWDML	4 BNC In x Looping Fiber Out; 4x4 Router; CWDM Looping

### FEATURES

Card-based design allows scalability with up to 40 BNC/Fiber interfaces per frame

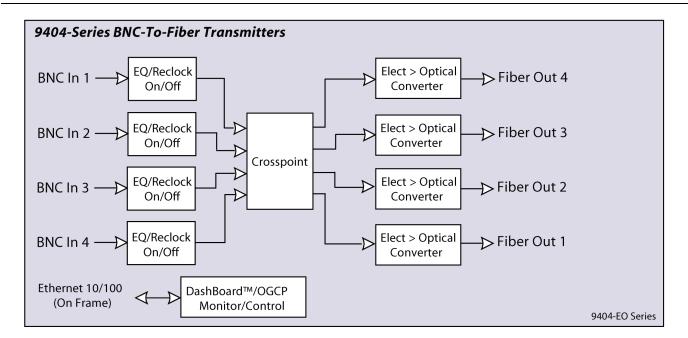
Low power/high-density design; only 10 Watts max. per card

Full support of SMPTE 424M, 292M, 259M and SMPTE 310M, SMPTE 344M, SMPTE 305M, M2S, DVB-ASI, and MADI standards/formats

I/O router crosspoints on all models allow selectable and flexible crosspoint distribution and DA functions on same card

Remote control/monitoring via DashBoard™ software, with soft-configurable crosspoint, EQ on/off, and reclock on/off

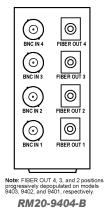
Five year warranty

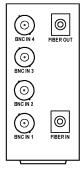




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Note: All models have four BNC IN connectors (as shown) which are routable to card fiber channels. On models with less than 4 fiber channels, not all four BNCs can be routed simultaneously to the fiber trunk.

RM20-9404-B-CWDML

## SPECIFICATIONS

#### Electrical

Power: 10 watts (max)

#### General

#### Tx/Rx Fiber Range:

Single-Mode optics; rates thru SD: 40 km (24.8 mi) max Single-Mode optics; rates thru HD: 24 km (14.9 mi) max

## Fiber Connector:

LC, ST, SC, or FC

#### Standards:

SMPTE 259M-C, SMPTE 292M, SMPTE 425M, SMPTE 297M, DVB/ASI, HD-SDI (SMPTE 292M), SD-SDI (SMPTE 259M) with EDH, MADI (AES10-2003) (Not compatible with AES-3id (standard AES PCM))

### ORDERING INFORMATION

9404-E0 4K/3G/HD/SD-SDI/ASI/MADI Quad-Channel 1310 nm Fiber Optic Transmitter with 4 BNC In/4 Fiber Out 4x4 Router

9404-E0-CWDM-WX-WX-WX 4K/3G/HD/SD-SDI/ASI/MADI Quad-Channel Fiber Optic Transmitter with 4 BNC In/4 Fiber Out 4x4 Router; CWDM

9404-E0-CWDML-WX-WX-WX 4K/3G/HD/SD-SDI/ASI/MADI Quad-Channel Fiber Optic Transmitter with 4 BNC In/4 Fiber Out 4x4 Router; CWDM Looping

RM20-9404-B-XX 20-Slot Frame Rear I/O Module (Standard Width) 4 BNC In, 4 Fiber Out

RM20-9404-B-XX-CWDML 20-Slot Frame Rear I/O Module (Standard Width) 4 BNC In, Fiber I/O Loop (please substitute fiber connector type in place of "-XX" in part number when ordering; see Note (2) below)

Input Type: BNC,  $75\Omega$ 

>15 dB up to 1.5 GHz

>10 dB up to 3 GHz

Input/Output Loop Return Loss:

Optical Power: -5 dBm to 0 dBm

Laser Power Range: Laser Class 1

Added Jitter: < 0.03 UI under 1 MHz

#### Notes:

(1) Use fiber wavelength codes for card Fiber Optic Modules (FOMs) when ordering. Available wavelengths (in nm) are as follows: 1270, 1290, 1310, 1330, 1350, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610. In "WX" places in part number, substitute code for wavelengths in each place as listed below:

-27: 1270nm -29: 1290nm -31: 1310nm -33: 1330nm -35: 1350nm -41: 1410nm -43: 1430nm -45: 1450nm

-47: 1470nm -49: 1490nm -51: 1510nm -53: 1530nm

-55: 1550nm -57: 1570nm -59: 1590nm -61: 1610nm (Example: For wavelengths 1270-1290-1310-1330 for 9404 card, order as "9404-E0-CWDM-27-29-31-33")

(2) Add fiber connector suffix to part numbers to specify fiber connection type (LC, ST, SC, FC) when ordering. (Example: For RM20-9404-B-XX-CWDM with type LC fiber connectors, order as

"RM20-9404-B-LC-CWDM".)

(3) Make certain when ordering companion OE (Receiver) cards that the same wavelength groupings are correspondingly also specified.

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