

## 9410DA-EO • 3G/HD/SD-SDI / ASI / MADI Fiber EO Transport/Distribution Amplifier with Full-Flexibility Crosspoint



The Cobalt® **9410DA-EO 3G/HD/SD-SDI / ASI / MADI Fiber EO Transport/Distribution Amplifier with Full-Flexibility Crosspoint** provides a card-based solution for high-density conversion from coax to fiber, as well as coaxial distribution. The 9410DA-EO is multi-rate, and supports SDI and ASI/DVB on all inputs and outputs with non-inverting outputs.

An SFP-based EO converter provides state-of-the-art fiber performance, power consumption, and compactness. A crosspoint (which is user-configurable via DashBoard™ GUI remote control) allows the card to apply any of the card inputs to various coax DA outputs as well as a fiber output. Up to 9 flexibly-sourced coaxial DA outputs are available per each card.

Using a high-density low-power design along with a high-density split rear module, up to 20 cards can be installed in a frame, providing 20 channels of EO conversion as well as up to 180 coaxial DA outputs. Excellent receive performance allows coaxial receive EQ for up to 110m 3G, 180m HD, and 360m SD cable length (1694A). Full user DashBoard™ or Remote Control Panel remote control allows full status and control access locally or across a standard Ethernet network.

### FEATURES

Full support of 3G/HD/SD-SDI and ASI/DVB

Fully-flexible coaxial crosspoint/DA provides up to 9 copies per card. Crosspoint can select from any card input.

Excellent coax receive performance – EQ allows 1694A cable lengths up to 110m (3G) / 180m (HD) / 360m (SD)

SFP-based EO converter provides state-of-the-art fiber performance, power consumption, and compactness.

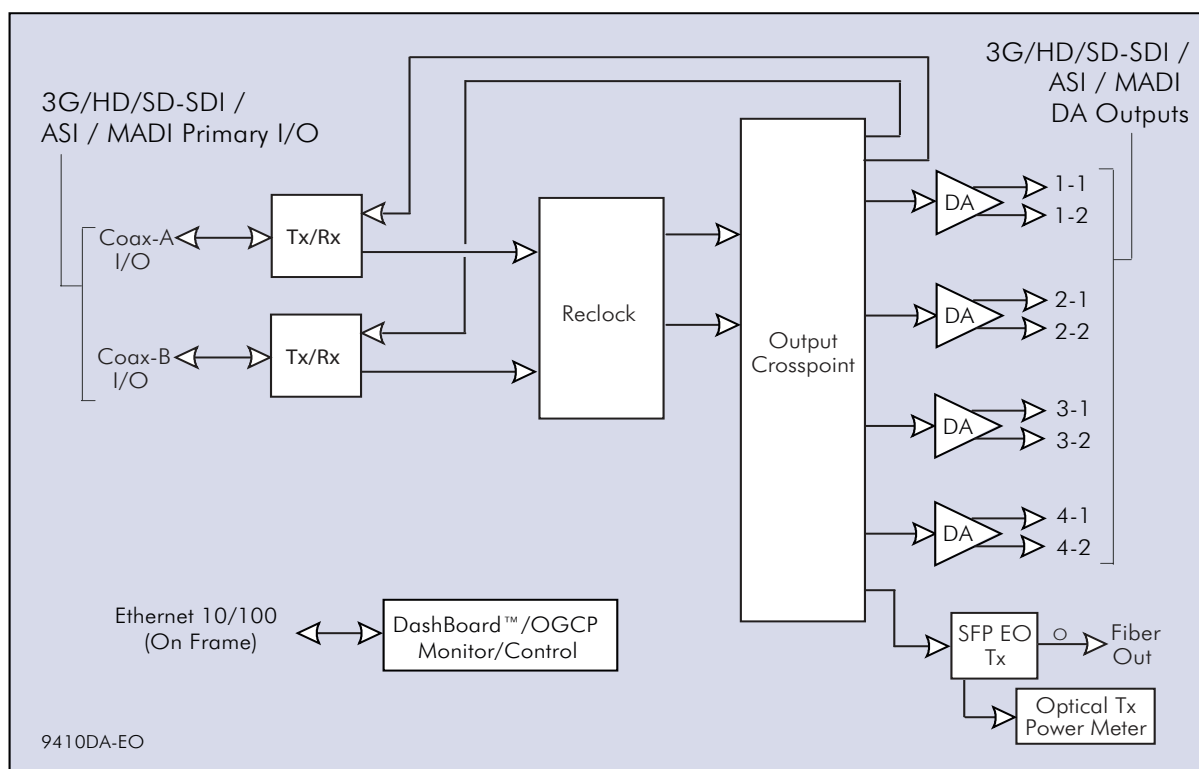
Automatic reclocking for all SDI data rates (auto-bypass for non-SDI data rates)

Optical Tx power status field allows optical transmit confidence assessment

All outputs are non-inverting – ASI can be outputted on any output

DashBoard™ status and full remote control

Five year warranty



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## SPECIFICATIONS

Note: Inputs/outputs are a function of rear I/O module used. Specifications subject to change.

### Power

< 10 Watts

### 3G/HD/SD-SDI / ASI / MADI Inputs/Outputs (Coaxial Primary)

(2) 75Ω BNC input/outputs max (A-I/O and B-I/O)  
SDI Formats Supported: SMPTE 259M, SMPTE 292M, SMPTE 424M

### Coaxial Receive Performance (Cable Length; Belden 1694A)

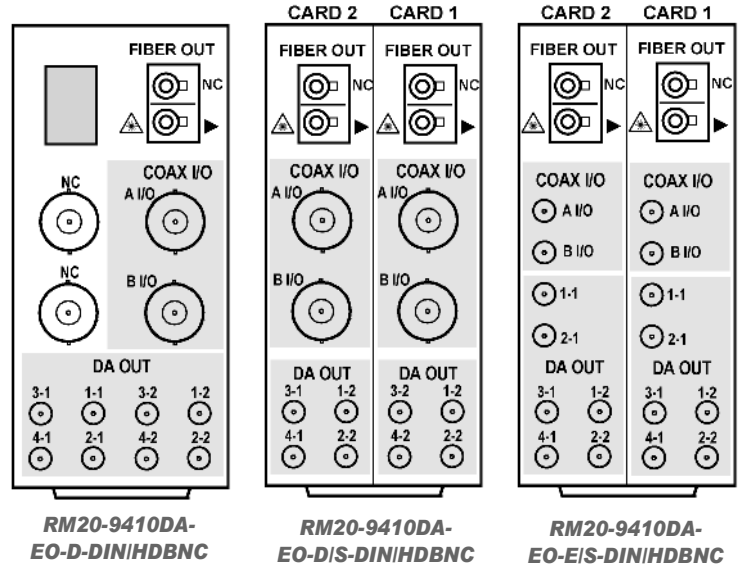
SDI Receive Cable Length (1694A): 110m/180m/360m (3G/HD/SD)

### Fiber Transmit Output

(1) Fiber output; LC connector  
Fiber Wavelength, Tx: 1310 nm  
Tx Power: -5.0 dBm (min)

### 3G/HD/SD-SDI / ASI / MADI Outputs (DA Outputs)

Four, 1x2 75Ω BNC outputs (8 total, max). Each DA pair can receive any primary or opposite-channel DA signal.  
Signal Level: 800 mV nominal  
Alignment Jitter: 3G/HD/SD: < 0.3/0.2/0.2 UI  
Timing Jitter: 3G/HD/SD: < 2.0/1.0/0.2 UI



## ORDERING INFORMATION

**9410DA-EO** 3G/HD/SD-SDI / ASI / MADI Fiber EO Transport/Distribution Amplifier with Full-Flexibility Crosspoint

**9410DA-EO-CWDM-WX** 3G/HD/SD-SDI / ASI / MADI Fiber EO Transport/Distribution Amplifier with Full-Flexibility Crosspoint (CWDM)

Use fiber wavelength codes below for card Fiber Optic Modules (FOMs) when ordering. Available wavelengths (in nm) are as follows: 1270, 1290, 1310, 1330, 1350, 1370, 1390, 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 -37: 1370nm  
-39: 1390nm -41: 1410nm -43: 1430nm  
-45: 1450nm -47: 1470nm -49: 1490nm  
-51: 1510nm -53: 1530nm -55: 1550nm  
-57: 1570nm -59: 1590nm -61: 1610nm  
(Example: 9410DA-EO-CWDM-27 has 1270 nm FIBER OUT CWDM wavelength)

**RM20-9410-EO-D-DIN** 20-Slot Frame Rear I/O Module (Standard-Width). (2) 3G/HD/SD-SDI / ASI / MADI input/output BNCs, (1) Fiber out (LC connector), (8) DA coaxial outputs (DA output connectors are DIN1.0/2.3) (**Note:** Mates to card in **odd** frame slot.) (**Note:** This rear module supersedes -B model (which is discontinued).)

**RM20-9410-EO-D-HDBNC** 20-Slot Frame Rear I/O Module (Standard-Width). (2) 3G/HD/SD-SDI / ASI / MADI input/output BNCs, (1) Fiber out (LC connector), (8) DA coaxial outputs (DA output connectors are HD-BNC) (**Note:** Mates to card in **odd** frame slot.) (**Note:** This rear module supersedes -B model (which is discontinued).)

**RM20-9410DA-EO-D/S-DIN** 20-Slot Frame Rear I/O Module (Split; supports 2 cards). (2) 3G/HD/SD-SDI / ASI / MADI input/outputs, (1) Fiber out (LC connector), (4) DA coaxial outputs (connections are per card; DA output connectors are DIN1.0/2.3) (**Note:** This rear module supersedes -B/S model (which is discontinued).)

**RM20-9410DA-EO-D/S-HDBNC** 20-Slot Frame Rear I/O Module (Split; supports 2 cards). (2) 3G/HD/SD-SDI / ASI / MADI input/outputs, (1) Fiber out (LC connector), (4) DA coaxial outputs (connections are per card; DA output connectors are HD-BNC) (**Note:** This rear module supersedes -B/S model (which is discontinued).)

**RM20-9410DA-EO-E/S-DIN** 20-Slot Frame Rear I/O Module (Split; supports 2 cards). (2) 3G/HD/SD-SDI / ASI / MADI input/outputs, (1) Fiber out (LC connector), (6) DA coaxial outputs (connections are per card; coaxial connectors are DIN1.0/2.3) (**Note:** This rear module supersedes -C/S model (which is discontinued).)

**RM20-9410DA-EO-E/S-HDBNC** 20-Slot Frame Rear I/O Module (Split; supports 2 cards). (2) 3G/HD/SD-SDI / ASI / MADI input/outputs, (1) Fiber out (LC connector), (6) DA coaxial outputs (connections are per card; coaxial connectors are HD-BNC) (**Note:** This rear module supersedes -C/S model (which is discontinued).)