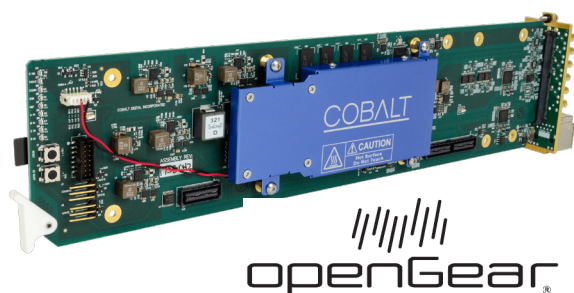


## 9924-4FS-12G · Quad-Channel 12G-SDI Frame Sync with Audio Embedding/ De-Embedding of AES and MADI



The Cobalt® 9924-4FS-12G Quad-Channel 12G-SDI Frame Sync with Audio Embedding/ De-Embedding of AES and MADI offers four independent signal paths of frame sync / audio embedding and de-embedding on a single open-Gear® card.

### FEATURES

|                                                                                                |                                                                                      |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Frame Sync with full H/V offset and manual/LOS video generator                                 | Full audio mixing between SDI, MADI, and AES                                         |
| Advanced audio processing allows routing, gain, delay and flexible mixing as standard features | SDI Output Crosspoint – connect any Output to any Input                              |
| Hot-swappable                                                                                  | (2) Gigabit Ethernet ports (reserved for future use)                                 |
| Five year warranty                                                                             | Remote control/monitoring via Dashboard™ software or OGCP-9000 remote control panels |

### SPECIFICATIONS

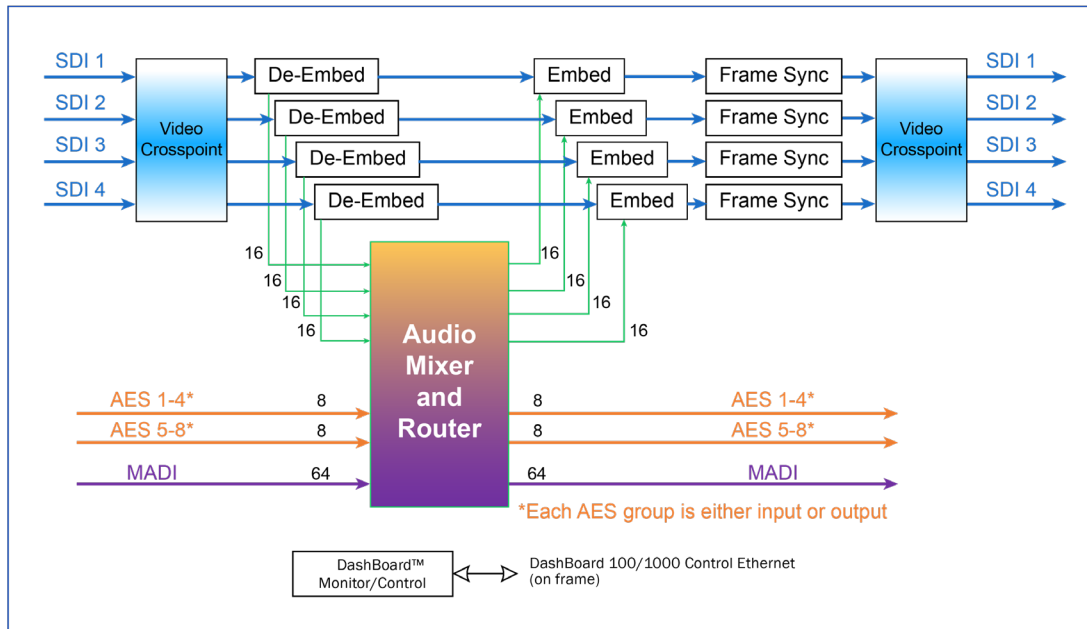
|                                                                                                                             |                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>AES Audio Inputs/Outputs</b><br>(8) 75Ω coaxial ports; each block of 4 ports is software-configurable as Input or Output | <b>12G/6G/3G/1.5G/SD-SDI Input/Outputs</b><br>(4) 75Ω Inputs<br>(4) 75Ω Outputs<br>Supports resolutions of: NTSC, PAL, 720p, 1080i, 1080psf, 1080p, and 2160p<br>Supports frame rate of: 23.98, 24, 25, 29.97, 30, 50, 59.94, and 60 |
| <b>MADI Audio Inputs/Outputs</b><br>(1) 75Ω Input<br>(1) 75Ω Output                                                         | Return Loss:<br>> 5 dB up to 12 GHz<br>> 7 dB up to 6 GHz<br>> 10 dB up to 3 GHz<br>> 15 dB up to 1.485 GHz                                                                                                                          |
| <b>Frame Reference Input</b><br>(2) reference from frame bus. SMPTE 170M/318M “Black Burst”, SMPTE 274M/296M “Tri-Level”    | Input Cable Length:<br>45m Belden 1694A cable at 11.88 Gbps<br>120m Belden 1694A cable at 2.97 Gbps<br>240m Belden 1694A cable at 1.485 Gbps<br>400m Belden 1694A cable at 270 Mbps                                                  |
| <b>Power Inputs</b><br>< 30 Watts                                                                                           | Output Signal Level: 800 mV ±10%<br><br>DC Offset: 0 V ± 50 mV<br><br>Rise and Fall Time @ 11.88 Gbps: < 45 ps<br><br>Alignment Jitter (12G/6G/3G/1.5G/SD): < 0.3/0.3/0.3/0.2/0.2 UI                                                 |

## 9924-4FS-12G · Quad-Channel 12G-SDI Frame Sync with Audio Embedding/ De-Embedding of AES and MADI

### BLOCK DIAGRAM

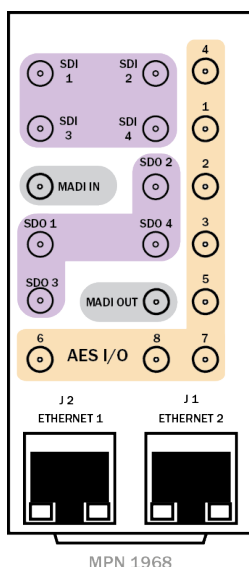
#### 9924-4FS-12G

Quad-Channel 12G-SDI Frame Sync with Audio Embedding/ De-Embedding of AES and MADI



### ORDERING INFORMATION

**COBALT 9924-4FS-12G** Quad-Channel 12G-SDI Frame Sync with Audio Embedding/ De-Embedding of AES and MADI openGear® card



#### Rear Module

##### RM20-9924-4FS-A-HDBNC (MPN 1968)

20-Slot Frame Rear I/O Module (Standard-Width)

(4) 12G/6G/3G/HD/SD-SDI Inputs

(4) 12G/6G/3G/HD/SD-SDI Processed Outputs

(8) AES I/O, each block of 4 ports is software-configurable as Input or Output

(1) MADI Input

(1) MADI Output

(2) Gigabit Ethernet ports (reserved for future use)

\*All coaxial connectors HDBNC