

3G/HD/SD-SDI Fiber-Optic OE Receiver with 16-Channel AES / 8-Channel Analog Audio Embed / De-Embed

FEATURES

- OE fiber receiver with fiber and coax as inputs
- ▶ 16-channel AES support and 8-channel analog audio support in one card. Individual per-pair embedding or de-embedding. Provides four-group SDI embed/de-embed and crossconversions between analog and AES discrete audio.
- DashBoard™ status display, audio meters, tone generators. GUI audio meters provide ready assessment of content presence and line-up.
- Audio embed adaptive SRC allows asynchronous 48 kHz AES audio to automatically sync with video 48 kHz timing for glitchfree embedding. Individual, per-pair SRC auto-detects and disables SRC when a Dolby pair
- is detected on an input pair.

 ▷ Low-power/high-density design

 less than 18 Watts per card
- Remote control/monitoring via Dashboard™ software

APPLICATIONS

- ⇒ Fly Packs
- House of Worship

AES & Analog audio embedding/de-embedding with built-in versatility of both coaxial and fiber SDI inputs.



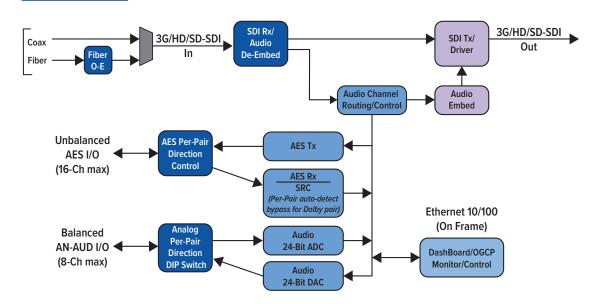
The OG-5230-EO 3G/HD/SD-SDI Fiber-Optic OE Receiver with 16-Channel AES/8-Channel Analog Audio Embed/De-Embed offers full-flexibility AES and analog audio embedding/de-embedding with the built-in versatility of both coaxial and fiber SDI inputs in a basic, economical, high-efficiency openGear® card. More than only a basic embedder/de-embedder, the OG-5230-EO offers the flexibility of fiber to-SDI OE receive as well as providing fully flexible AES and analog audio embedding/de-embedding.

The OG-5230-EO provides full 16-channel embed / de-embed between AES, 8-channel analog audio, and all four groups of embedded audio. Audio embed adaptive SRC allows asynchronous 48 kHz AES audio

to automatically sync with program video 48 kHz timing for glitch-free embedding. Individual, per-pair SRC auto-detects and disables SRC when a Dolby pair is detected on an input pair. Analog embed/de-embed conforms with professional balanced audio at 0 dBFS to pro 24 dBu levels using full 24-bit conversion. Fully error-free pathological pattern operation is fully compatible with professional fiber video interfaces. Full audio crosspoint allows per-channel gain and routing controls, as well as built-in tone generators.

Preset save/load allows saving custom card settings while allowing one-button revert to factory settings. Full user DashBoard™ allows full status and control access locally or across a standard Ethernet network.

BLOCK DIAGRAM





3G/HD/SD-SDI Fiber-Optic OE Receiver with 16-Channel AES / 8-Channel Analog Audio Embed / De-Embed

ORDERING INFORMATION

Part #	Description	
OG-5230-EO	3G/HD/SD-SDI Fiber-Optic Transceiver with 16-Channel AES / 8-Channel Analog Audio Embed / De-Embed	
R2-5230-A	20-Slot Frame Rear I/O Module (Standard Width) (1) 3G/HD/SD-SDI Input BNC, (1) 3G/HD/SD-SDI Output BNC, (1) Fiber Input (LC connector), (8) Balanced Analog Audio I/O, (8) Unbalanced AES I/O (coaxial; DIN 1.0/2.3)	
R2-5230-B	20-Slot Frame Rear I/O Module (Standard Width) (1) 3G/HD/SD-SDI Input BNC, (1) 3G/HD/SD-SDI Output BNC, (1) Fiber Input (LC connector), 8) Balanced Analog Audio I/O, (8) Unbalanced AES I/O (coaxial; HD-BNC)	
R2-5230-C	20-Slot Frame Rear I/O Module (Standard Width) (1) 3G/HD/SD-SDI Input BNC, (1) 3G/HD/SD-SDI Output BNC, (1) Fiber Input, (8) Balanced Analog Audio I/O, Unbalanced AES I/O/COMM (via HD-15 connector)	

TECHNICAL SPECIFICATIONS

Electrical

	Power	< 18 Watts			
SDI/Fiber Innuts/Outnuts					

SDI/Fiber inputs/Outputs		
Inputs	1 (75Ω BNC)	
Output	1 (75Ω BNC)	
SDI Receive Cable Length (1694A)	120m/180m/360m (3G/HD/SD)	
SDI Return Loss	>15 dB up to 1.485 GHz; >10 dB up to 2.970 GHz	
Alignment Jitter	3G/HD/SD: < 0.3/0.2/0.2 UI	
Timing Jitter	3G/HD/SD: < 2.0/1.0/0.2 UI	
Fiber input	1 - LC connector	
Receive Sensitivity	-23 dBm; 1260 to 1620 nm	
SDI Formats	SMPTE 259M, SMPTE 292M, SMPTE 424M	

Audio Conversion Format

48 kHz sampling, 24-bit. Auto-SRC bypass for Dolby inputs. Analog audio I/O conforms to +24 dBu <=> 0 dBFS

Analog Audio Specifications

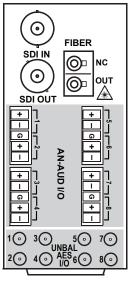
Input Impedance	>10 kΩ
Reference Level	-20 dBFS
Nominal Level	+4 dBu
Input Clip Level)	+24 dBu (0 dBFS)
Freq. Response	±0.2 dB (20 Hz to 20 kHz)
SNR	115 dB (A weighted)
THD+N	-96 dB (20 Hz to 10 kHz)
Crosstalk	-106 dB (20 Hz to 20 kHz)
Output Impedance	< 50 Ω
Max. Output Level	+24 dBu (0 dBFS)

Discrete Audio Input/Output

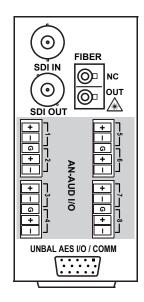
(8) Unbalanced AES (AES-3id; 75Ω) with per-pair port direction controls(8) Balanced Analog Audio with per-pair port direction controls

Note: Inputs/outputs are a function in some cases of rear I/O module used.

REAR MODULE MODELS



R2-5230-A R2-5230-B



R2-5230-C