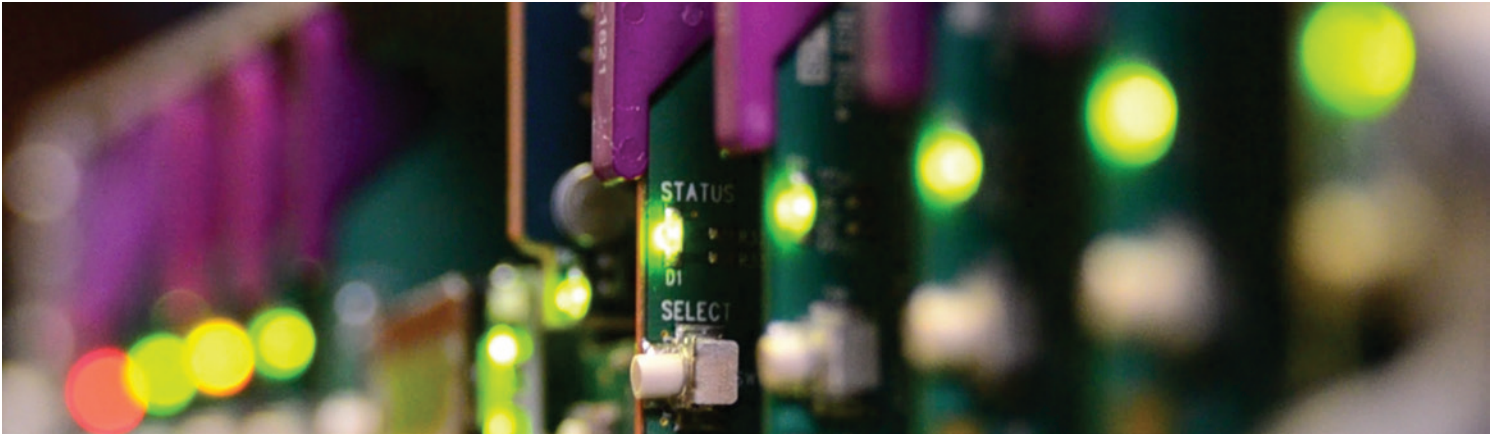
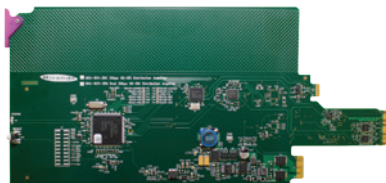


HDA-1931 / HDA-3931

Dual 3G/HD/SD SDI Distribution Amplifier (DA) with Optional Fiber Connectivity



HDA-1931



HDA-3931

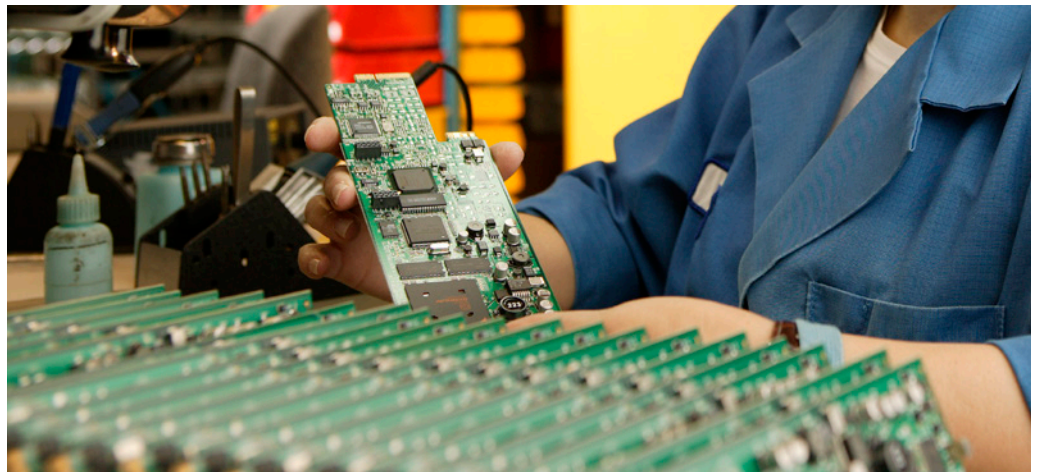
Space-saving, modular platform for advanced signal distribution.

The HDA-1931 and HDA-3931 from Grass Valley, a Belden Brand, are dual 3G/HD/SD SDI video distribution amplifiers (DAs) that support a variety of compressed and uncompressed serial digital video signals.

The HDA-1931 and HDA-3931 provide up to eight reclocked outputs with automatic equalization for up to 150 meters (492 feet) of cable using Belden 1694A at 1.5Gb/s and up to 90 meters (295 feet) at 3 Gb/s.

The HDA-1931 and HDA-3931 offer fiber connectivity, making it ideal for longer cable lengths.

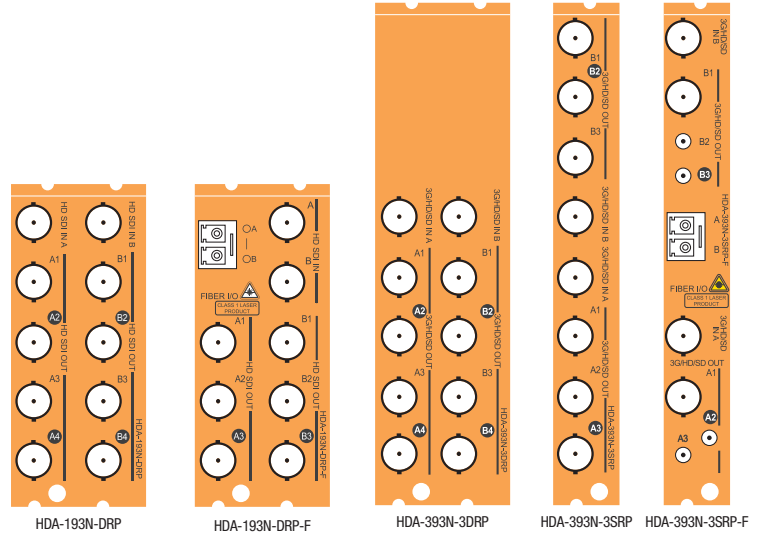
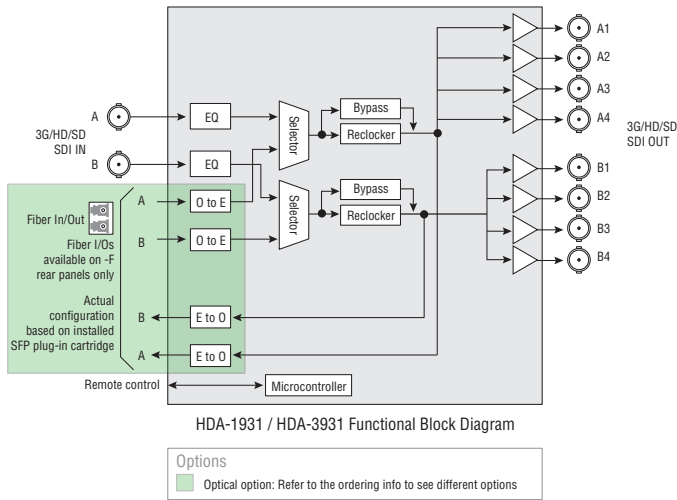
The HDA-1931 and HDA-3931 share the same feature set and specifications, except that HDA-1931 is a 2 RU card built for the Densité 2 frame while the HDA-3931 is a 3 RU card made for the Densité 3 frame series. Each product has its specific rears as illustrated in the Key Features section and in the ordering information.



HDA-1931 / HDA-3931 Dual 3G/HD/SD SDI DA

KEY FEATURES

- Two 3G/HD/SD SDI inputs
- Up to 8 3G/HD/SD SDI outputs
- Supports bit rates all the way up to 3Gb/s
- Backup input available in single channel mode
- Automatic format detection and cable equalization
- Optional fiber I/O



Note: Numbered outputs marked with black circles are not suitable for DVB-ASI distribution.

SPECIFICATIONS

Electrical Inputs (2)

Signal:
 3G/HD/SD SDI SMPTE 424M, 292M, and 259M-C compliant
 Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mb/s
 EN50 83-9 DVB-ASI 270 Mb/s

Cable length (Belden 1694A):

3G: 90m (295 ft.) at 3 Gb/s
 HD: 150m (492 ft.) at 1.5 Gb/s
 SD: 300m (984 ft.) at 270 Mb/s

Return loss:

>15 dB up to 1.5 GHz
 >10 dB from 1.5 GHz to 3 GHz

Electrical Outputs (8)

Signal:
 3G/HD/SD SDI SMPTE 424M, 292M, and 259M-C compliant
 Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mb/s
 EN50 83-9 DVB-ASI 270 Mb/s (5 outputs only)

Return loss:

>15 dB up to 1.5 GHz
 >10 dB from 1.5 GHz to 3 GHz

Jitter (wideband):

HD/SD: <0.2 UI
 3G: <0.3 UI

Rise / fall time:

135 ps max., 20% to 80%, for HD
 400 - 800 ps, 20% to 80%, for SD

Processing Performance

Signal path: 10 bits
Latency: <6 ns

Electrical

Power: 5W

ORDERING

Densité 2 frame

HDA-1931
 HDA-193N-DRP
 HDA-193N-DRP-F

Densité 3 frame

HDA-3931
 HDA-393N-3DRP

 HDA-393N-3SRP
 HDA-393N-3SRP-F

Description

Dual 3G/HD/SD distribution amplifier with EQ and reclocking
 Double rear connector panel to be used in dual 1x4 operation mode
 Double rear connector panel to be used in dual 1x3 operation mode with fiber option support
 Single rear connector panel to be used in dual 1x3 operation mode
 Single rear connector panel with DIN connectors with fiber option support

Fiber options

SFP-R-LC
 SFP-RR-LC
 SFP-T-S13-LC
 SFP-TT-S13S13-LC
 SFP-RT-S13-LC

Description

Single fiber RX (input) cartridge with LC/PC connector
 Dual fiber Rx (input) cartridge with LC/PC connector
 Single fiber TX (output) cartridge at 1310 nm with LC/PC connector
 Dual fiber Tx (output) cartridge at 1310 nm with LC/PC connector
 Dual fiber Rx/Tx (input/output) cartridge 1310 nm with LC/PC connector

Note: This product can also make use of SFP Optical Plug-in Cartridges from the WDM and CWDM series. Other types of SFP Optical Plug-In Cartridges may be available for this product.

Remote control

iControl, iControl Solo



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