MultiDyne
Video & Fiber Optic Systems

HD-3000 Series
Dual Channel, Multi-Rate 3G, HD, SD, ASI Fiber Optic Transmitters and Transceivers

Features

- Fiber transport from 5Mbps to 3Gbps
- Supports SMPTE 424M, 292M, 259M, 310M, 344M, 305M & DVB-ASI
- Equalizes up to 120m of Belden 1694A cable at 3 Gbit
- Equalizes up to 150m of Belden 1694A cable at 1.485 Gbit
- Supports embedded audio and data
- Color OLED Display w/ button joystick for navigation
- Monitor laser status, data rate, HD lock, Power
- Turn reclocking on/off
- Multimode or Singlemode
- ST, SC, LC, FC
- Small, rugged, portable
- Stand alone or rack
- SEVEN year warranty

Applications

- Sports production
- Remote camera links
- Distance learning
- OB Van Inter-connects
- Pre-fibered venues
- Courtesy feeds

7 Year
MultiDyne
Warranty

LiGHTBRiX

Small in Size But Big on Features and Value

The HD-3000-II takes the solid performance of the original HD-3000 Series and adds numerous convenience features to give you unmatched diagnostic and status reporting.

With six new models to choose from, the 3000 Series allows you to not only send signals from point-to-point, but also to drop off a signal and continue on with fiber to one or more locations. Depending on the model, you can have loop BNC outputs and loop fiber outputs. And with the ability to EQ up to 120m of coax at 3Gb speeds, you have the flexibilty to easily customize your signal distribution.

But what really makes these new modules different is the 1" (diagonal) color OLED display that isn't just for looks. The display is enabled by a proximity sensor on the faceplate so there is no distraction from a display that is always on. Menu navigation is via an easy-to-use button joystick. Not only will the OLED inform you of laser status and type of SDI input, you will also be able to turn reclocking on/off and see exactly what your received optical power is.
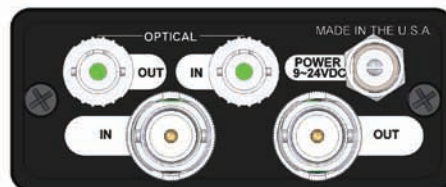
Having all of this information at the touch of a button is essential in allowing you to monitor and, if necessary, troubleshoot your signals.

These modules can be fitted with the optical connector of your choice (ST, SC, LC) and will operate on multimode or singlemode fiber. Though, for best performance over longer distances at the highest bit-rates, singlemode fiber is recommended.
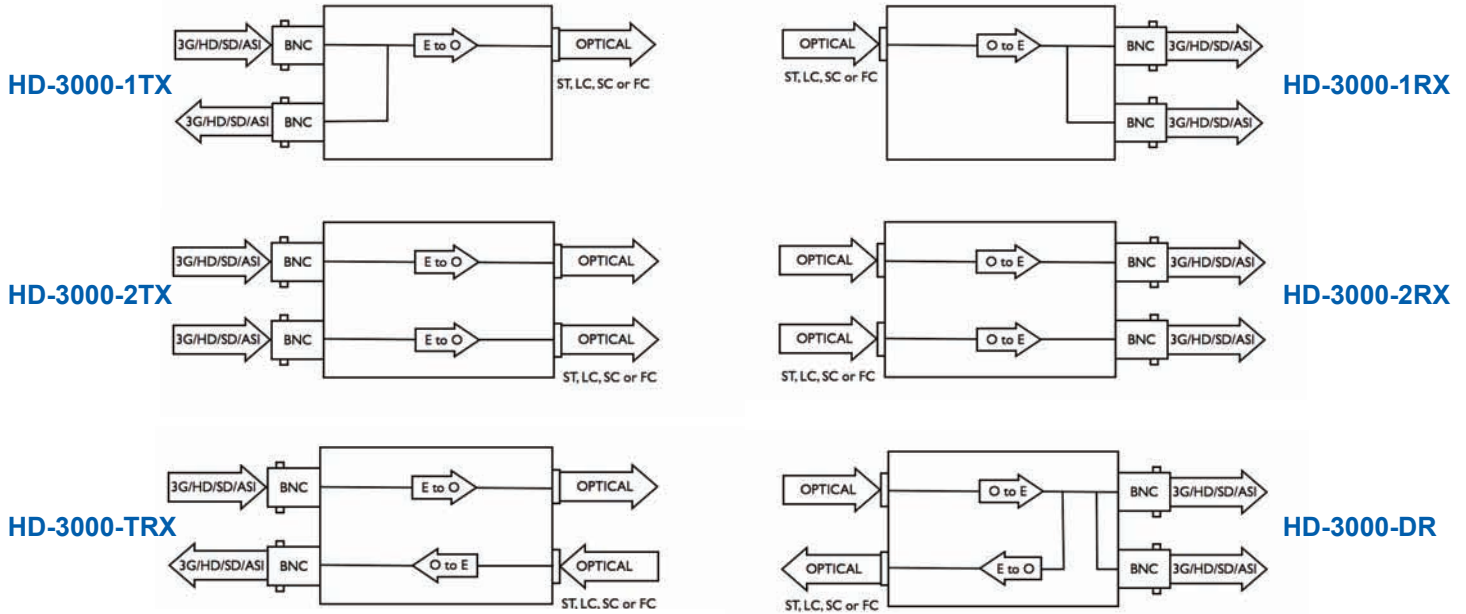
The HD-3000's can be used as stand-alone modules or six units can be racked mounted into a single RU via our convenient rack kits. They are also fully compatible with our LightBox and LightCube portable systems and the EOS router/patch-bay.

The 3000 Series. SDI transport with the flexibilty to manage varying signal topographies and status indications in plain language without cryptic LEDs.

Designed and manufactured in New York.

Block Diagrams

HD-3000-1TX

HD-3000-1RX

HD-3000-2TX

HD-3000-2RX

HD-3000-TRX

HD-3000-DR

Specifications

Video

Bit Rates:	5Mbps to 3Gbps
# of Ins/outs:	1 or 2 BNC(model dependent)
Impedence	75 Ohms
Level	800mV (peak to peak)
Standard:	SMPTE 425M, 297M, 292M, 259M-C & DVB-ASI
Bit Error Rate	(@-22dBm) 10^{-11}
Return Loss:	>15 dB at 5 MHz - 1.485 GHz >10 dB at 1.5 GHz to 3 GHz
Jitter(wideband)	< 0.3 UI
Rise/Fall times	<120psecs

Optical

Wavelengths	1310 or 1271-1611
Optical Connector	ST, SC or LC
Optical Source	FP laser or CWDM DFB
Optical Detector	PIN Diode
TX Output	-7 Standard (0 DFB)
RX Sensitivity	-22 dBm
Link Margin	15 to 22 dB (up to 40km)
Fiber Type	Multimode or Singlemode Singlemode recommended

Cable Length Equalized (w/Belden 1694A)

3 Gbps:	>120m
1.485 Gbps:	>150m
143-360 Mbps:	>350m

Environmental/ Electrical

Power:	9-24 VDC
Consumption	<5 Watts
Temperature:	0 to +70C
Humidity	0-95% RH non-condensing
Dimensions	2.75 x 1.125 x 5 inches
Weight	7 oz.
Display	1 inch color OLED w/ proximity sensor indicates Power, Data Rate, Data Lock, Laser Status, Reclocker Status & Laser Status
Cursor Ctrl	Button joystick

Ordering Information

Module	Choose ST, SC or LC Power Supply Included
HD-3000-1TX	3Gbps Multi-rate Serial Digital Video Transmitter @ 1310nm, -5dBm for: SD/HD/3G-SDI, DVB ASI, SMPTE 310M
HD-3000-1RX	3Gbps Multi-rate Serial Digital Video Receiver, Sensitivity -20dBm for: SD/HD/3G-SDI, DVB ASI, SMPTE 310M
HD-3000-TRX	3Gbps Multi-rate Serial Digital Video Transceiver, Sensitivity -20dBm for: SD/HD/3G-SDI, DVB ASI, SMPTE 310M
HD-3000-2TX	Dual 3Gbps Multi-rate Serial Digital Video Transmitter @ 1310nm, -5dBm for: SD/HD/3G-SDI, DVB ASI, SMPTE 310M
HD-3000-2RX	Dual 3Gbps Multi-rate Serial Digital Video Receiver, Sensitivity -20dBm for: SD/HD/3G-SDI, DVB ASI, SMPTE 310M
HD-3000-DR	3Gbps Multi-rate Serial Digital Video Drop Transmitter @ 1310nm, -5dBm for: SD/HD/3G-SDI, DVB ASI, SMPTE 310M Optical IN and OUT with two BNC outputs
Optional Optical	
Single Fiber Operation	Please contact factory or your local reseller
CWDM Wavelengths	Please contact factory or your local reseller
Accessories	
RM6	6 unit rack-mounting kit, mount 6 HD-1500, HD-3000, SD-270 or HDMI-ONE in 1 Rack Unit
BP-6	Blank panel for RM6 rack-mounting kit
HD-3000-PS	Spare Power Supply for HD-3000 & HD-1500 units

Transmit • Route • Receive

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