

## Features

- Supports two independent uncompressed 3Gb/s HD-SDI signals
- SMPTE 424M, 292M, 259M, 310M, ASI Compliant
- Singlemode & Multimode fiber options
- Uses all-digital processing for crystal clear picture with no compression
- Real-time video transmission for exceptional quality and resolution
- Two independent output streams (2 x 2.97 Gbps) with local loopbacks
- Receiver contains SMPTE 424M cable driver and reclocker
- Transmitter contains SMPTE 424M cable driver, adaptive cable equalizer, and reclocker
- Status notifications for video signal & optical faults
- Supports DashBoard Management & Control Software

## Applications

- Remote OB Van/Truck Video Feeds
- Broadcast Studio Camera Feeds
- HD Routing (requires Optilinx Optical Switch)
- Long-haul Signal Transport
- Lecture Hall Projector Connectivity
- Medical / Surgical Room Broadcast

## 3G HD-SDI Video Transmission

The OPG-2HDP is an excellent choice for transporting SMPTE compliant video signals over long or short distances with a single optical wavelength. Supporting two independent SMPTE video signals, the system offers the complete flexibility needed for transporting full uncompressed (2.97 Gbps) 1080p HD over optical fiber.

Additionally, the OPG-2HDP is compatible with our Optiva Platform Video, Audio and Data Media Transport System. The combination of openGear, Optiva and OPTICAM-3GHD transmitters, with micro 3G HD-SDI technology, enables the most versatile, interoperability for 3G HD signal transport in the Broadcast industry!

## System Design

The OPG-2HDP was designed to be fully compatible with the openGear standard for terminal equipment design. This means that when you install an openGear enclosure, you can then purchase additional insert cards from different manufacturers to be used in the same enclosure. The standard enclosure is a 19" rackmount frame that can hold up to 20 insert cards. A separate module handles the management and control systems, and allows for local or remote interfaces. Each enclosure utilizes 2U of rack space, maximizing the overall usage of the equipment rack.



Opticomm's wide range of 3GHD transport solutions makes your choice easy when looking for a flexible, future-proofed system, that you can operate for years to come. Look for our signature "3G HD" symbol on all Opticomm-EMCORE products that are compatible with the SMPTE standard for 1080p video transport. It is a symbol of the quality, reliability and flexibility you get on every link!

**DATASHEET** **FIBER OPTICS**

## Ordering Information

Transmitter	Receiver
OPG-2HDPT-D1/D1-XX	OPG-2HDPR-D5/D5-XX
OPG-2HDPT-D2/D2-XX	OPG-2HDPR-D6/D6-XX
OPG-2HDPT-D2D/D2D-XX	
OPG-2HDPT-D3/D3-XX	
OPG-2HDPT-D4A/D4B-XX	
OPG-2HDPT-D4C/D4D-XX	
OPG-2HDPT-D4E/D4F-XX	
OPG-2HDPT-D4G/D4H-XX	
OPG-2HDPT-D4I/D4J-XX	
OPG-2HDPT-D4K/D4L-XX	
OPG-2HDPT-D4M/D4N-XX	
OPG-2HDPT-D4O/D4P-XX	
OPG-2HDPT-D4Q/D4R-XX	

■ "XX" may be replaced with any of these optical connector types "FC, ST, SC, LC"

## Optical Specifications

Code	Wavelength (nm)	Distance (Km)	Output Power (dBm)	RX Sensitivity (dBm)	Budget Loss (minimum)
D1/D1	1310 MM	0.5	-5 to 0	-	12
D2/D2	1310 SM	10	-5 to 0	-	12
D2D/D2D	1310 SM	30	0 to 3	-	14
D3/D3	1550 SM	50	0 to 3	-	14
D4A/D4B	1270/1290 SM	30-50	-5 to 0	-	12
D4C/D4D	1310/1330 SM	30-50	-5 to 0	-	12
D4E/D4F	1350/1370 SM	30-50	-5 to 0	-	12
D4G/D4H	1390/1410 SM	30-50	-5 to 0	-	12
D4I/D4J	1430/1450 SM	30-50	-5 to 0	-	12
D4K/D4L	1470/1490 SM	30-50	-5 to 0	-	12
D4M/D4N	1510/1530 SM	30-50	-5 to 0	-	12
D4O/D4P	1550/1570 SM	30-50	-5 to 0	-	12
D4Q/D4R	1590/1610 SM	30-50	-5 to 0	-	12
D5/D5	1270-1610 SM	-	-	-18	-
D6/D6	1270-1610 SM	-	-	-28	-

- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distance may require attenuation
- Transmitting two SMPTE signals requires two fibers

## Video

Specifications	Values
Standards	SMPTE 424M, 310M, 292M, 259M, ASI
Data Rate	19.4 Mbps - 2.97 Gbps
Connector	BNC (IEC 60169-8)
Pathological Test Code	RP-178
Cable Equalization	2.97 Gbps @ 300'

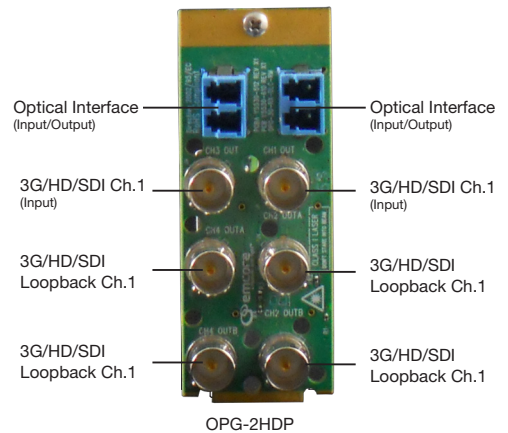
## General

Specifications	Values
Dimensions (Insert Card)	14" W x 3.0" H
Weight	11 oz.
Operating Temperature	0° to +50°C
Storage Temperature	-30°C to +85°C
Humidity	0 to 95% non-condensing
Power Consumption (XMT)	> 3 Watts
Power Consumption (RCV)	> 3 Watts

## Monitoring & Control

Specifications	Values
Local	Front panel LED status and alert indicators
Remote	DashBoard Remote Management Software

## Backplane Diagram



## Compliance

