



**Shattering Limitations** – DVI Gear's HyperLight® Series is a new generation of advanced Active Optical Cables (AOC) that employs cutting edge technology to deliver unprecedented resolution, performance and value. HyperLight DVI cables provide robust features in a rugged yet compact and lightweight form factor. They are fully HDCP 1.4 compliant and support signals with data rates up to 4.95 Gbps. These features enable HyperLight cables to support any Single-Link DVI resolution with cable lengths up to 100 meters.

**Easy to Install, Even in Plenum Spaces** – HyperLight cables are plenum-rated (UL CMP-OF), compact, lightweight and highly flexible. Constructed using a hybrid design of 4x POF (Polyfluorinated Optical Fiber) and 6x copper wires, they are rugged, yet flexible, with a minimum bend radius of only two millimeters. To minimize cable diameter, two removable DVI docking connectors may be detached, revealing a connector cross section that measures a mere 13.9 x 14.2 millimeters. The docking connectors include fixation screws for added security, as do the removable cable pull covers. These features make the cables easy to install even in narrow conduits, as well as in plenum spaces.

**Professional Environments** – HyperLight cables are designed for use in mission critical applications where image quality and dependability are paramount. The video signals are transmitted over four optical fibers, which make them immune to interference from environmental noise. The optical transmission path provides a very low RFI / EMI profile, which allows the cables to be installed in sensitive applications with strict security requirements. The cables draw power from the connected DVI source, eliminating the need for an external power supply. HyperLight AOC cables are ideally suited for applications that require ultra-high resolution DVI signals to be extended over long cable runs with flawless image quality.

### FEATURES

- Lightweight, compact, flexible, plenum-rated Active Optical Cables (AOC)
- Supports DVI 1.0 and HDCP 1.4. Supports HDMI using optional adapter cables
- Supports data rates up to 1.65 Gbps / lane or 4.95 Gbps total
- Extends any DVI Single-Link resolution up to 328 ft. (100 meters)
- Detachable DVI docking connectors can be secured with fixation screws
- Removable cable pull covers facilitate secure cable pulls
- Powered by the DVI source, no AC power adapter needed
- Supports DDC communications for EDID and HDCP
- Low RFI / EMI profile for sensitive applications



Cable and DVI Docking Connector, Cable Pull Cover



Cable mated in DVI Docking Connector

### SPECIFICATIONS

Performance	
Standards Compliance	DVI 1.0, HDCP 1.4, UL CMP-OF
Maximum Pixel Clock Frequency	165 MHz
Maximum Video Bit Rate	1.65 Gbps/TMDS Lane, 4.95 Gbps total (Single-Link DVI)
Maximum Color Depth	Up to 24 bits/pixel
Maximum Supported Resolutions	1920x1200, 2048x1080
Digital Audio Support	1-8 channels, 16 or 24-bit Linear PCM, 32-192 kHz sampling rate
Connections	
DVI Input / DVI Output	1x 18+1 DVI-D Male Connector
Power	No external power supply is required
DDC Support	
EDID Support	EDID communications are fully supported
HDCP Support	HDCP 1.4
Optical	
Optical Technology	4x Discrete Optical Channels, 10 GHz, 850 nm
Optical Transmitter / Receiver	Tx Module: 4x 850 nm Multi-Mode VCSELs    Rx Module: 4x GaAs PIN Photo Diodes
Cable	
Fiber Cable Type	Hybrid cable with 4x POF (Polyfluorinated Optical Fiber) and 6x copper members
Cable Jacket	Plenum-Rated, Black
Standard Lengths (meters) <sup>(1)</sup>	10, 15, 20, 25, 30, 40, 50, 60, 75, 100
Standard Lengths (feet) <sup>(1)</sup>	32.8, 49.2, 65.6, 82.0, 98.4, 131.2, 164.0, 196.9, 246.1, 328.1
Maximum Cable Length	328 ft. / 100 meters <sup>(1)</sup>
Mechanical – Cable	
Product Weight	Varies with length
Maximum Tensile Load	> 200N
Minimum Bend Radius	2 mm (fiber and jacket)
Crush Resistance	> 500N
Cable Connector (L x W x H)	Male PCBA Edge Connector with Removable Cable Pull Cover, 1.8" x 0.5" x 0.4" (43.2 x 13.9 x 14.2 mm)
Cable Outside Diameter (W x H)	0.2" x 0.1" (5.1 mm x 2.9 mm)
Mechanical – Tx and Rx Docking Plugs	
Docking Connectors	PCBA Edge Connector to Male DVI Connector
Construction	High-impact plastic enclosures with set screw for DVI Docking Connector
Dimensions (L x W x H)	1.8" x 0.8" x 0.5" (54.8 mm x 39.7 mm x 16.2 mm)
Environmental	
Operating / Storage Temperature	-4° to +158° F (-20° to +70° C); -4° to +185° F (-20° to +85° C)
Operating / Storage Humidity	5% to 85% (non-condensing)
Power Requirements	
Power Source	Powered from DVI source device
Power Consumption	< 0.3 watt maximum
Regulatory Approvals	
Fiber Optic Cable	FCC, UL, CE, RoHS
Warranty	
Limited Warranty	3 Years Parts and Labor
Model Number	
DVI-23xxx-AOC	DVI HyperLight® Active Optical Cable ( xxx = length in meters )
Accessories	
Included: 1x Quick Start Guide; 2x Removable Cable Pull Covers (DVI-2300-AOC-CVR) Optional: DVI-I Female to HDMI Male Adapter Cable (Model No. DVI-8511b / DVI-8511c)	

**Note 1:** These cables can support HDMI applications using optional adapter cables.

**Note 2:** All specifications are subject to change without notice.