



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)
- DVI Connectors have easily accessible locking screws for high-density applications
- Powered by the DVI source, no AC power adapter needed
- Supports DDC communications for EDID and HDCP
- Low RFI / EMI emissions for sensitive applications
- Shielded Metal DVI Connectors provide increased immunity to RFI / EMI, allowing the cable to be used in high-interference applications

Shattering Limitations – DVIgear’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. The cables draw power from the connected DVI source, eliminating the need for an external power supply.

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. Non-detachable, shielded metal DVI connectors provide improved immunity to RFI / EMI, allowing the cable to be used in environments with high levels of ambient interference. 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.



Shielded Metal DVI Source Connector

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SPECIFICATIONS

Performance	
Standards Compliance	DVI 1.0, HDCP 1.4, UL CMP-OF (File E471410)
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) ⁽¹⁾	3, 5, 7.5, 10, 12.5, 15, 20, 25, 30, 40, 50, 60, 75, 100
Standard Lengths (feet) ⁽¹⁾	9.8, 16.4, 24.6, 32.8, 41.0, 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
Mechanical – Cable	
Product Weight	Varies with length
Maximum Tensile Load	> 200N
Minimum Bend Radius	2 mm (fiber and jacket)
Crush Resistance	> 500N
Cable Outside Diameter (W x H)	0.2" x 0.1" (5.1 mm x 2.9 mm)
Mechanical – Tx and Rx Docking Plugs	
Construction	Non-detachable DVI connectors with shielded metal enclosures for high RFI / EMI immunity
Dimensions (L x W x H)	2.1" x 1.56" x 0.59" (53.3 x 39.5 x 14.9 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-M	DVI HyperLight® Active Optical Cable (xxx = length in meters)
Accessories	
Included: 1x Quick Start Guide	
Optional: DVI-I Female to HDMI Male Adapter Cable (Model No. DVI-8511c)	

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

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