

7.8 mm Hybrid Fiber Optic Cables

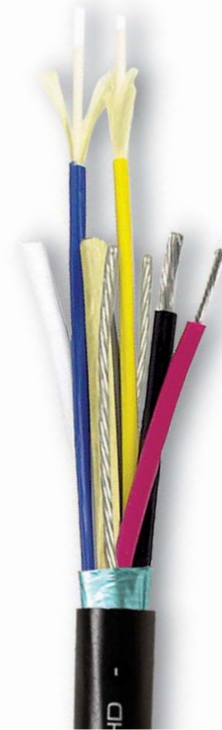
Lightweight and Flexible, yet Rugged Hybrid Fiber Cable for Portable Applications

Radically different from typical industry products but with the same performance characteristics of traditional SMPTE 311 cables, the Gepco[®] Brand flexible HDC720HD 7.8 mm hybrid fiber cable is 16 percent smaller and 40 percent lighter in design.

The revolutionary construction of the HDC720HD starts with replacing the typical heavy steel strength member with a Kevlar[®] strength member that has the same pull strength of steel, but is lighter and more flexible. Unlike steel, Kevlar expands and contracts at the same rate as the glass members during temperature extremes, keeping the elements in the cable aligned reducing migration. Using Kevlar in place of steel also means the cable has virtually no memory, making the cable easier to pay off, lay flat and wind back up on the drum.

For further durability, the HDC720HD utilizes bend-insensitive fiber elements with very low attenuation and a bend radius of 0.2 mm—versus 2.0 mm for traditional single-mode fiber—in a breakout style with additional Kevlar protection around the individual fibers.

In the HDC720HD, the typical outer braid is replaced with two 18 AWG drain wires and a foil shield that allow the cable to be more flexible, lighter and smaller in diameter. The power conductors consist of two 16 AWG conductors so you can still achieve the same distance a regular SMPTE 311 cable performs to. The master jacket of HDC720HD is polyurethane material with a glossy finish that reduces the pickup of dirt and debris from outside applications, making it easier to keep clean.



Features & Benefits

- Extremely Durable and Lightweight
- 7.8 mm Diameter Allows for 16% More Cable per Reel
- Breakout Bend-Insensitive Optical Fibers with Kevlar[®] & PVC Jackets
- Strong Kevlar[®] Strength Member with Same Pull Strength as Steel
- Large Conductors for Camera Power
- Four Large-Gauge Copper Conductors
- Heat-Resistant
- Heavy-Duty Polyurethane Jacket

Applications

- High-Definition Camera-to-CCU Interconnect
- Portable Cables
- Studio or Remote Environments
- High-Definition Steadicams[®]

7.8 mm Hybrid FiberOptic Cables & Assemblies

Mechanical Specifications (General)

Part #	Nominal OD	Master Jacket (Type, Colors)	Overall Shield	Approx. Weight
HDC720HD	7.8 mm	Polyurethane, Black	100% Foil with 2 x 18 AWG (7x26) Stranded TC	51 lbs/Mft (76 kg/km)
<i>Heavy-Duty 7.8 mm Hybrid Camera Cable</i>				

Mechanical Specifications (Components)

Component	Number	Type	Insulation (Type, OD)	Color Code
Optical	2	Single-Mode Bend-Insensitive Fiber Optic (8.3µm Mode Field, 125µm Cladding)	CPE Fiber Coating, Kevlar® Wrap, Tight Tube PVC Jacket, 0.062" (1.57 mm) Finished O.D.	One Blue, One Yellow
Signal	2	24 AWG (7x32) Stranded TC	PE, 0.045" (1.14 mm)	One Red, One Gray
Auxiliary	2	16 AWG (65x34) Stranded TC	PE, 0.074" (1.88 mm)	One Black, One White
Strength Member	1	Kevlar® Strength Member	PP, 0.090" (2.29 mm)	Yellow

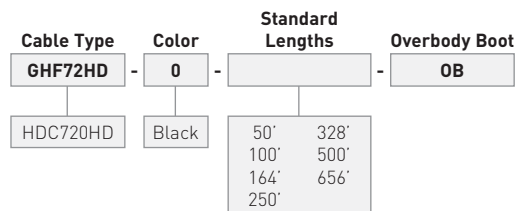
Electrical & Optical Specifications

Fiber Attenuation	Signal Conductor DCR	Power Conductor DCR	Shield DCR	Insulation Resistance (Power or Signal)	Dielectric Strength (Power or Signal)	Operating Temperature
<0.50 dB/km @ 1310/1550nm	23.8 Ω/Mft	4.01 Ω/Mft	2.93 Ω/Mft	>10M Ω/km	3000 Volts RMS @ 20°C, 60Hz for 1 min.	-40°C to +75°C (@ 0 to 95% humidity)

7.8 mm Portable, Heavy-Duty

Features

Machine Polished -55 dB RL (Typical)



Connectors

LEMO® SMPTE 304 Hybrid Connectors - 1 Plug, 1 Socket with Metal Dust Caps

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