

DP Pro Plenum Series

DISPLAYPORT 8K OPTICAL CABLES – PLENUM



8K

The Extron DP Pro Plenum Series features active, hybrid optical-copper cables for the ultra high-speed transmission of DisplayPort signals. They support video resolutions up to 8K/30 @ 4:4:4, HDR, EDID, HDCP, CEC, and 32 channels of audio. Available in cable assembly lengths up to 150 feet (45.7 meters), the DP Pro Plenum Series offers the benefits of fiber optics with the simplicity of traditional copper cables.

- ▶ Conforms to DisplayPort 1.4 standards
- ▶ Supports data rates up to 32.4 Gbps and video resolutions up to 8K/30 @ 4:4:4
- ▶ Support for HDR - High Dynamic Range video
- ▶ Support for EDID, HDCP, and CEC
- ▶ 8K/30 verified
- ▶ Flexible, ultra thin diameter cable
- ▶ NEC CMP rated plenum cable
- ▶ Highly resistant to EMI/RFI interference
- ▶ Gold-plated contacts
- ▶ No external power is needed
- ▶ Color-coded and labeled ends
- ▶ Available in lengths from 25 feet to 150 feet (7.6 meters to 45.7 meters)

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DESCRIPTION

The Extron **DP Pro Plenum Series** features active, hybrid optical-copper cables for the ultra high-speed transmission of DisplayPort signals. These cables support video resolutions up to 8K/30 @ 4:4:4, HDR, EDID, HDCP, CEC, and 32 channels of audio. Ultra-thin diameter, narrow bend radius cable construction provides ease of installation in tight spaces, including plenum air spaces, without compromising performance. The active cables are unidirectional and draw ultra-low power from the connected DisplayPort devices. DP Pro Plenum Series cables are available in lengths from 25 feet to 150 feet (7.6 meters to 45.7 meters).

The DP Pro Plenum Series offers the benefits of fiber optics with the simplicity of traditional copper cables. Providing the best combination of price and performance, this cabling solution is ideal for sending high data rate DisplayPort signals over long cable runs while maintaining full signal integrity and providing reliable operation to support mission-critical applications.

DP Pro Plenum cables use glass, multimode optical fiber to transmit 8K/30 and multi-channel audio signals. Built-in active circuitry converts the incoming electrical signal into an optical signal on one end, and back into an electrical signal on the opposite end. This circuitry requires ultra-low power and is powered by the connected DisplayPort source. The cable can also draw power from the display. All other non-bandwidth intensive or low-speed signals are carried on the integrated copper wires, including EDID, HDCP, CEC, and 3.3 V power.

All DP Pro Plenum Series cables are unidirectional. For easy identification and cable orientation, a blue-colored ring encircles the source connector neck and connector ends are molded with descriptive text to indicate source and sink directionality.



SPECIFICATIONS

TRUE 8K SPECIFICATION			
Max 8K Capabilities			
Resolution	Refresh Rate	Chroma Sampling	Max Bit Depth per Color
7680 x 4320	60 Hz	4:2:0	8 bit
	30 Hz	4:4:4	
Max 4K Capabilities			
Resolution	Refresh Rate	Chroma Sampling	Max Bit Depth per Color
3840 x 2160 VESA	120 Hz	4:4:4	8 bit
	60 Hz		16 bit
3840 x 2160 SMPTE/CTA			
Frame rate ¹	24 Hz - 240 Hz for resolutions up to 32.4 Gbps		
Chroma sampling ¹	4:4:4, 4:2:2, or 4:2:0		
Color bit depth ¹	8, 10, or 12 bits per color		
Signal type	DisplayPort 1.4, HDCP 1.4, HDCP 2.3, HDR		
Max. video data rate	32.4 Gbps (8.1 Gbps per lane)		
NOTE: ¹ Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdata to determine video parameters supported by this data rate.			

PERFORMANCE/ELECTRICAL		
Power consumption	375 mW @ 3.3 V	
MECHANICAL		
Max Tensile strength	500 N (50 kg, 110 lbs)	
Max. compression load resistance	200 N (20.4 kg, 45 lbs)	
Cable outer diameter	0.18" (4.6 mm)	
Bend radius	0.79" (20 mm)	
GENERAL — PHYSICAL CHARACTERISTICS		
Connector type	Male DisplayPort	
Contacts	Gold plated	
Material	Conductors: Multimode fibers and 24 AWG tinned copper wires Jacket: PVC	
Connector dimensions	2.44" L x 0.87" W x 0.51" thick (62 mm L x 22 mm W x 13 mm thick)	
Storage temperature rating	Minimum: -20°C Maximum: 70°C	
Operating temperature rating	Minimum: 0°C Maximum: 50°C	
Humidity	85°C and 85% relative humidity, non-condensing	
Regulatory compliance	CE, UL-CMP	
Warranty	Limited Lifetime Performance	
Model	Version Description	Part number
DP Pro P/25	25' (7.6 m)	26-727-25
DP Pro P/35	35' (10.6 m)	26-727-35
DP Pro P/50	50' (15.2 m)	26-727-50
DP Pro P/75	75' (22.8 m)	26-727-75
DP Pro P/100	100' (30.4 m)	26-727-100
DP Pro P/125	125' (38 m)	26-727-125
DP Pro P/150	150' (45.7 m)	26-727-150

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

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