

# DM-CBL-8G-P

## DigitalMedia 8G™ Cable, Plenum



- > 350 MHz ultra high-performance shielded CAT5e (F/UTP)
- > Optimized for high-definition digital AV and Ethernet data networking applications
- > Precision manufactured and tested to exceed CAT5e specifications
- > Qualified for use wherever a high-quality shielded CAT5e is required
- > Ensures Crestron® guaranteed performance for DigitalMedia 8G+® and Sonnex® Link
- > Highly recommended for use with HDBaseT®
- > Every spool individually tested and certified
- > Measurement markings on the outer jacket
- > Type CMP “plenum” rated

Crestron® DigitalMedia 8G™ Cable (DM-CBL-8G-P) is a 350MHz-certified twisted-pair cable with overall foil shield (F/UTP) that is engineered to deliver optimum performance for use in data networking and high-definition AV signal distribution applications. It is precision manufactured and tested to significantly exceed the CAT5e specifications for bandwidth, crosstalk, and interference rejection, and is qualified for use wherever a high-quality shielded CAT5e wire is required. DigitalMedia 8G Cable provides a complete Crestron-guaranteed wiring solution for use with DigitalMedia 8G+® devices, and is also highly recommended for use with Sonnex® Multiroom Audio Systems, HDBaseT®, and other CATx based audio, video, and data distribution products.

### 350MHz Multimedia and Data-Grade Shielded CAT5e

For digital multimedia or Ethernet data networking, DM 8G® Cable provides the finest shielded CAT5e on the market. Every spool is individually certified to ANSI/TIA/EIA-568-B.2 Category 5e, and tested to 350 MHz bandwidth, ensuring ultimate performance for demanding AV and data network applications. Its high-quality 100% foil shield ensures very low EMI/RFI interference, preventing video signal interruption or loss of data — even in noisy environments. Foot markers printed on the cable’s outer jacket make it easy to verify the exact length of each cable during installation.

### DigitalMedia 8G+® HD AV Signal Distribution over One Wire

Crestron DigitalMedia™ (DM®) is the world’s most evolved system solution for distributing uncompressed, high-definition digital video and audio throughout a home or commercial structure. DigitalMedia 8G+ is the latest generation of DM, providing a true one-wire transport for moving HD and Ultra HD video, high-bitrate 7.1 audio, high-speed Ethernet, and power over CAT5e. DigitalMedia 8G Cable is specially designed and pre-qualified for use with DM 8G+® transmitters, receivers, and switchers. Compared to ordinary CAT5e, DM 8G Cable affords much higher performance margin to ensure a reliable installation every time.<sup>[1]</sup>

### HDBaseT® Recommended

HDBaseT technology is a consumer electronic connectivity technology optimized for whole-home and commercial multimedia distribution. HDBaseT converges uncompressed full HD digital video, audio, Ethernet, power, and control signals through a single CAT5e cable. Crestron DM 8G Cable is ideally designed and tested for use with HDBaseT products.<sup>[1]</sup>

### A Complete Crestron-Guaranteed Solution

Termination of DM 8G cable is accomplished using Crestron DM-8G-CONN or DM-8G-CONN-WG shielded RJ45 type connectors. These connectors are specially designed to maintain maximum bandwidth and provide 100% shielding against interference to ensure consistent, reliable system performance. Quick and easy field-termination if facilitated using the DM-8G-CRIMP or DM-8G-CRIMP-WG crimping tools.<sup>[2]</sup>

*DM-CBL-8G-P is Type CMP “plenum” rated for installation in environmental air-handling spaces.*

# DM-CBL-8G-P DigitalMedia 8G™ Cable, Plenum

See also Crestron DigitalMedia Ultra Cable ([DM-CBL-ULTRA-P](#)) for applications requiring the transmission of DM 8G+ or HDBaseT signals with resolutions above HD 1080p, 2K, or WUXGA, and cable lengths more than 230 feet (70 m).

## SPECIFICATIONS

### Construction

F/UTP with four twisted pairs, inner jacket, drain, overall foil shield, ripcord, and overall jacket

### Electrical & Performance

**Mutual Capacitance:** 17.1 pF / ft

**Velocity of Propagation:** 69%

**Propagation Delay Skew:** 45ns / 100 m

**DC Resistance:** 28.6 Ohms / 1000 ft maximum

**DC Resistance Unbalance of a Pair:** 5% maximum

**Capacitance Unbalance:** 330 pF / 100 m

**Characteristic Impedance:** 100 Ohms  $\pm$ 15% (1-250 MHz)

### (4) Twisted Pairs

**Colors:** Blue/white, orange/white, green/white, brown/white

**Conductors:** 24 AWG solid copper

**Insulation:** 0.0055 inch thick FEP

**Outer Diameter (per conductor):** 0.040 inch (1.016 mm) maximum

### Inner Jacket

**Color:** White

**Material:** Low-smoke PVC

**Thickness:** 0.0135  $\pm$ 0.0015 inch (0.3429  $\pm$ 0.0381 mm)

### Shield

**Drain:** 26 AWG solid tin/copper

**Overall Shield:** Aluminum foil (100% coverage)

### Outer Jacket

**Color:** Blue

**Material:** Low-smoke PVC

**Thickness:** 0.018 inch (0.4572 mm)

**Outer Diameter:** 0.244  $\pm$ 0.006 inch (6.2  $\pm$ 0.15 mm)

**Minimum Recommended Bend Radius:** 2.75 inches (70 mm)

**Maximum Pull Tension:** 25 lbf (111 N)

### Rating

NEC Article 800; UL Subject 444, Type CMP; CSA Type CMP;  
ANSI/TIA/EIA-568-B.2 Category 5e

## MODELS & ACCESSORIES

### Available Models

**DM-CBL-8G-P-SP500:** DigitalMedia 8G™ Cable, Plenum, 500 ft spool

**DM-CBL-8G-P-SP1000:** DigitalMedia 8G™ Cable, Plenum, 1000 ft spool

### Available Accessories

**DM-8G-CONN:** Connectors for DM-CBL-8G DigitalMedia 8G™ Cable

**DM-8G-CRIMP:** Crimping Tool for DM-8G-CONN

**DM-8G-CONN-WG:** Connectors with Wire Guide for DM-CBL-8G DigitalMedia 8G™ Cable

**DM-8G-CRIMP-WG:** Crimping Tool for DM-8G-CONN-WG

Notes:

- For DM 8G+ or HDBaseT applications transporting video resolutions above HD 1080p, 2K, or WUXGA over cable lengths greater than 230 feet (70 m), please use Crestron DigitalMedia Ultra Cable ([DM-CBL-ULTRA-P](#)). Refer to the [Crestron DigitalMedia Design Guide, Doc. #4546](#) for complete DM system design guidelines.
- All connectors and crimp tools sold separately.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

Crestron, the Crestron logo, DigitalMedia, DigitalMedia 8G, DigitalMedia 8G+, DM, DM 8G, DM 8G+, and Sonnex are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. HDBaseT is either a trademark or registered trademark of the HDBaseT Alliance in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice.  
©2015 Crestron Electronics, Inc.