DM-CBL-8G-NP

DigitalMedia 8G[™] Cable, Non-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
- > NEC® Type CM and CSA® Type CMR rated

Crestron® DigitalMedia $8G^{\text{TM}}$ Cable (DM-CBL-8G-NP) 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 $8G^{\text{+}}$ ® 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. [1]

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.[1]

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.^[2]

DM-CBL-8G-NP is NEC® Type CM and CSA® Type CMR rated for installation in walls, raceways, and some other non-plenum spaces. For actual installation allowances and restrictions, refer to the applicable electrical code and any other authority having jurisdiction. For plenum applications requiring Type CMP rated cable, use DM-CBL-8G-P.



DM-CBL-8G-NP DigitalMedia 8G™ Cable, Non-Plenum

See also Crestron DigitalMedia Ultra Cable (DM-CBL-ULTRA-NP) 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 ±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 HDPE

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

Inner Jacket

Color: White Material: PVC

Thickness: 0.0135 ± 0.0015 inch $(0.3429 \pm 0.0381 \text{ mm})$

Overall Shield

Drain: 26 AWG solid tin/copper

Shield: Aluminum foil (100% coverage)

Outer Jacket

Color: Blue Material: PVC

Thickness: 0.018 inch (0.4572 mm)

Outer Diameter: 0.244 ±0.006 inch (6.2 ±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 CM; CSA Type CMR; ANSI/TIA/EIA-568-B.2 Category 5e

MODELS & ACCESSORIES

Available Models

DM-CBL-8G-NP-SP500: DigitalMedia 8G[™] Cable, non-plenum,

500 ft spool

DM-CBL-8G-NP-SP1000: DigitalMedia 8G[™] Cable, non-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 DigitalMe-

dia 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-NP). Refer to the Crestron DigitalMedia Design Guide, Doc. #4546 for complete DM system design guidelines.
- 2. 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 or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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