

# DigitalMedia 8G™ Single-Mode Fiber Input Card for DM® Switchers

- > Modular input card for a DM-MD8X8, DM-MD16X16, or DM-MD32X32 switcher
- > Provides a single DM 8G® SM Fiber input
- > Supports cable lengths up to 7.5 miles (12 km) using CresFiber® 8G SM or G.652.D single-mode fiber<sup>[1]</sup>
- > Handles video resolutions up to Full HD 1080p
- > Handles computer resolutions up to WUXGA
- > Handles 3D video and Deep Color
- > Handles Dolby® TrueHD, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > HDCP compliant
- > Includes an HDMI® output for pass-through of the input signal
- > Includes a stereo analog line-level audio output with volume control<sup>[2]</sup>
- > Allows extraction of stereo 2-channel audio signals
- > Occupies a single DM switcher input card slot
- > Provides a rack-mountable DM 8G SM Fiber receiver solution using the optional DMCI card interface<sup>[3]</sup>

The DMC-S2 is an input card designed for use with any card-based Crestron® DigitalMedia™ Switcher. It provides one DM 8G® SM Fiber input, with associated HDMI® pass-through and analog audio outputs. The DM 8G SM Fiber input enables the connection of a DM 8G SM Fiber transmitter, or the output of another DM® switcher, using a single strand of single-mode fiber.<sup>[1]</sup>

*NOTE: Refer to model DMC-S2-DSP for use with surround sound sources.*

## DigitalMedia 8G™ Single-Mode Fiber

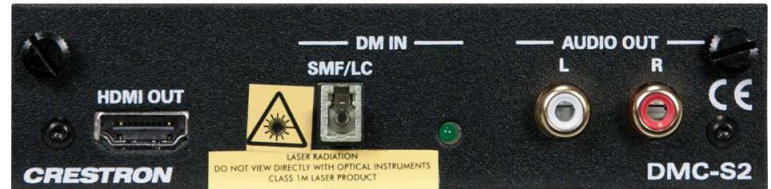
Engineered for ultra high-bandwidth and ultimate scalability, DigitalMedia 8G Single-Mode Fiber (DM 8G SM Fiber) provides a true one-wire lossless transport for moving high-definition video, audio, Ethernet, and control signals over single-mode fiber. DM 8G SM Fiber handles uncompressed Full HD 1080p video signals with support for HDCP, Deep Color, 3D, and high-bitrate 7.1 audio, as well as computer signals up to WUXGA. All signals are transported over one strand of single-mode fiber, supporting distances up to 7.5 miles (12 km) using CresFiber® 8G SM or G.652.D single-mode fiber optic cable.<sup>[1]</sup>

## HDMI® Pass-Through

Every DM switcher input card includes an HDMI output port, which can be used to pass the input signal through to a local audio processor or video monitor, or to feed a second DM switcher for output expansion purposes.

## Audio Extracting

The DMC-S2 also includes an unbalanced analog audio output, allowing stereo audio signals to be extracted from the digital input and fed to a multiroom audio distribution system. The output volume is adjustable via a control system using a keypad, touch screen, handheld remote, or mobile device.<sup>[2]</sup>



*NOTE: For applications requiring the simultaneous distribution of multi-channel surround sound and 2-channel stereo audio signals, use model DMC-S2-DSP.*

## Standalone DM 8G SM Fiber Receiver

In addition to its use as an input card for DM switchers, the DMC-S2 may also be used with the DMCI DigitalMedia Card Interface<sup>[3]</sup> to provide a DM 8G SM Fiber receiver solution that's perfect for installation in an equipment rack or AV cart, or as a portable display interface.

To configure a DM switcher complete with input and output cards, cables, and other peripherals, please use the online [DigitalMedia Switcher Configuration Tool](#).

Please refer to the DigitalMedia Resources Webpage at <http://www.crestron.com/dmresources/> for additional design tools and reference documents.

## SPECIFICATIONS

### Video

**Input Signal Types:** DM 8G® SM Fiber (DigitalMedia™ over one single-mode fiber optic strand)<sup>[1]</sup>

**Output Signal Types:** HDMI® or DVI<sup>[4]</sup> to switcher backplane and HDMI OUT connector

**Formats:** DM 8G SM Fiber & HDMI w/Deep Color & 3D, DVI, HDCP content protection support

**Input Resolutions, Progressive:** 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1365x1024@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24),

# DMC-S2 DigitalMedia 8G™ Single-Mode Fiber Input Card for DM® Switchers

1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock

**Input Resolutions, Interlaced:** 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI up to 165MHz pixel clock

**Output Resolutions:** Matched to input

## Audio

**Input Signal Types:** DM 8G SM Fiber

**Output Signal Types:** HDMI (multi-channel) to switcher backplane and HDMI OUT connector, analog stereo 2-channel<sup>[2]</sup>, allows audio breakaway

**Digital Formats:** Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio™, up to 8ch PCM

**Analog Format:** Stereo 2-channel

**Digital-To-Analog Conversion:** 24-bit 48 kHz

**Performance (analog):** Frequency Response: 20Hz to 20kHz ±0.5dB;  
S/N Ratio: >95dB, 20Hz to 20kHz A-weighted;  
THD+N: <0.005% @ 1kHz;  
Stereo Separation: >90dB

**Volume Gain Range (analog):** -80dB to 0dB

## Communications

**DigitalMedia:** DM 8G SM Fiber, HDCP, EDID, CEC, Ethernet

**HDMI:** HDCP, EDID, CEC

## Connectors

**HDMI OUT:** (1) 19-pin Type A HDMI female;  
HDMI digital video/audio output;  
Also supports DVI<sup>[4]</sup>

**DM IN SMF/LC:** (1) LC female optical fiber connector;  
DM 8G Single-Mode Fiber input;  
Connects to the DM 8G SM Fiber output of a DM transmitter or other DM device via CRESFIBER8G-SM single-mode fiber optic cable<sup>[1]</sup>

**AUDIO OUT:** (2) RCA female;  
Unbalanced stereo line-level audio output<sup>[2]</sup>;  
Output Impedance: 100 Ohms nominal;  
Maximum Output Level: 2 Vrms

## Indicators

**DM IN SMF/LC:** (1) green LED, indicates DM link status

## Construction

Plug-in card, occupies (1) DM switcher input card slot, includes metal faceplate w/black finish

## Weight

8.0 oz (227 g)

## MODELS & ACCESSORIES

### Available Models

**DMC-S2:** DigitalMedia 8G™ Single-Mode Fiber Input Card for DM® Switchers

### Available Accessories

**CRESFIBER8G-SM-P:** CresFiber® 8G Single-Mode Fiber Optic Cable, plenum

**CRESFIBER8G-SM-CONN-LC-12:** CresFiber® 8G Single-Mode Fiber Optic Cable Connector, LC, 12-Pack

**CRESFIBER-TK:** CresFiber® Termination Kit (AFL Telecommunications®)

**CBL Series:** Crestron® Certified Interface Cables

**MP-WP Series:** Media Presentation Wall Plates

**MPI-WP Series:** Media Presentation Wall Plates - International Version

**DMCI:** DigitalMedia™ Card Interface

Notes:

1. The maximum cable length for DigitalMedia 8G Single-Mode Fiber (DM 8G SM Fiber) is 7.5 miles (12 km) using Crestron [CRESFIBER8G-SM](#) or third-party G.652.D (or better) single-mode fiber optic cable. Refer to the [Crestron DigitalMedia Design Guide, Doc. #4546](#) for complete system design guidelines. All wire and cables are sold separately.
2. The analog stereo audio output is only active when the input source is outputting a 2-channel stereo signal. For applications using a multichannel surround sound source, use model [DMC-S2-DSP](#) which provides simultaneous surround sound and stereo downmix output signals.
3. Item(s) sold separately.
4. DVI is supported via the HDMI output using a suitable adapter or interface cable. [CBL-HD-DVI](#) interface cables are available 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.

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