

# DigitalMedia 8G<sup>™</sup> Single-Mode Fiber Input Card for DM<sup>®</sup> 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[1]
- > 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 [3]

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 complementary 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.[1]

#### 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. [2]



NOTE: For applications requiring the simultaneous distribution of multichannel 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 w/Deep Color & 3D Output Signal Types: w/Deep Color & 3D (DVI compatible [4]) 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, 1440x900@60Hz, 1600x900@60Hz, 1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock



## **DMC-S2** DigitalMedia 8G<sup>™</sup> Single-Mode Fiber Input Card for DM<sup>®</sup> Switchers

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 (multichannel pass-through from input),

analog stereo (2-channel pass-through from input [2])

**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™, LPCM up to 8 channels

Analog Formats: Stereo 2-channel

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

Analog Performance: Frequency Response: 20Hz to 20kHz ±0.5dB;

S/N Ratio: >95dB, 20Hz to 20kHz A-weighted;

THD+N: <0.005% @ 1kHz; Stereo Separation: >90dB

Analog Volume Adjustment: -80dB to 0dB

#### Communications

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

HDMI: HDCP, EDID, CEC

NOTE: Supports management of HDCP and EDID; supports management of CEC between the connected HDMI device and a control system

#### 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<sup>™</sup> Single-Mode Fiber Input Card for DM<sup>®</sup> Switchers

#### **Available Accessories**

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

CRESFIBER8G-SM-CONN-LC-12: Connectors for CresFiber® 8G Single-Mode Fiber Optic Cable, 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<sup>™</sup> Card Interface

#### Notes:

- 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.
- 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.
- 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 <a href="https://www.crestron.com/salesreps">www.crestron.com/salesreps</a> or by calling 800-237-2041.

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

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