

## DigitalMedia 8G™ Single-Mode Fiber Input Card w/Down-mixing for DM® Switchers

The DMC-S2 is an input card for a Crestron® DigitalMedia™ Switcher, providing one DM 8G® SM Fiber input. The DM 8G SM Fiber input enables the connection of a DM 8G SM Fiber Transmitter, or the output of another DM® switcher. Just one single-mode fiber optic strand is required, supporting distances up to 7.5 miles (12 km) using **CresFiber® 8G SM** or G.652.D single-mode fiber.<sup>[1]</sup>

The DMC-S2-DSP provides all of the features of the **DMC-S2** with the addition of internal surround sound down-mixing to enable the simultaneous distribution of uncompressed 7.1 surround sound and 2-channel down-mix signals. The DMC-S2-DSP is recommended for use with Blu-ray Disc® players and other HD sources that output multi-channel surround sound audio via HDMI®, allowing the multi-channel signal to reach the surround sound system without requiring any decoding, while also providing a 2-channel down-mix to feed a stereo zone or audio distribution system.

In addition to the DM 8G SM Fiber input, the DMC-S2-DSP also includes HDMI and stereo analog audio outputs. The HDMI output 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. The analog audio output, which features programmable volume control, breaks out the stereo audio signal from the DM 8G SM Fiber input and passes it through to feed a multi-room audio distribution system.

The DMC-S2-DSP may also be used with the **DMCI** DigitalMedia Card Interface 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. As a DM 8G SM Fiber receiver, and as a DM switcher input card, the DMC-S2-DSP enables EDID signal detection and format management, CEC device control, and audio breakaway.

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® SMF (DigitalMedia™ over one single-mode fiber optic strand)<sup>[1]</sup>

**Output Signal Types:** HDMI® or DVI<sup>[2]</sup> to switcher backplane and HDMI OUT connector

**Formats:** 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),



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 inputs

### Audio

**Input Signal Types:** DM 8G SMF

**Output Signal Types:** HDMI (simultaneous multi-channel and 2-channel down-mix) to switcher backplane, HDMI (multi-channel pass-thru from input) at HDMI OUT, analog stereo 2-channel, allows audio breakaway

**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

**Decoder:** Cirrus Logic® CS49700 HD Audio Decoder DSP with dual 32-bit cores

**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

### Connectors

**HDMI OUT:** (1) 19-pin Type A HDMI female;

HDMI digital video/audio output;

Also supports DVI<sup>[2]</sup>

**DM IN SMF/LC:** (1) LC female optical fiber connector;

DM 8G Single-Mode Fiber input;

Connects to the DM 8G SMF 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 with level control;

Maximum Output Level: 2 Vrms;

Output Impedance: 100 Ohms nominal

## 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-DSP:** DigitalMedia 8G™ Single-Mode Fiber Input Card w/Down-mixing 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:

- For DM 8G SMF wiring up to 7.5 miles (12 km) between devices, use Crestron [CRESFIBER8G-SM](#) or generic 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 sold separately.
- HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. [CBL-HD-DVI](#) interface cables 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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