Digital Media[®]

HD-TXC-101-C-1G-E Series

DM Lite® Transmitter for HDMI®, IR and RS-232 Signal Extension over CATx Cable, Wall Plate



- Pairs with a DM Lite® or DMPS Lite™ receiver
- Enables extension of HDMI®, RS-232, and IR signals
- Links to the receiver via a single CAT5e (or higher) twisted pair cable
- Supports 4K and UHD at up to 130 ft (40 m)
- Supports HD 1080p, WUXGA, and 2K at up to 230 ft (70 m)
- Handles 4K video resolutions up to 4K60 4:2:0 and 4K30 4:4:4
- Handles 3D video and Deep Color
- Supports Dolby® TrueHD, Dolby Atmos®, DTS HD®, DTS:X®, and uncompressed 7.1 linear PCM audio
- Compatible with HDMI, DVI, and Dual-Mode DisplayPort™ sources
- HDCP 2.2 compliant
- Passes CEC and EDID signals
- Extends bidirectional RS-232 and IR control signals
- Flush wall mount design
- Installs in a single-gang U.S. electrical box (2-1/4" deep) or plaster ring (not included)
- Decorator style faceplate sold separately
- Normally powered by the receiver (surface-mountable) over the link cable

The HD-TXC-101-C-1G-E (-B-T or -W-T) is a DM Lite® wall plate transmitter designed to pair with a DM Lite or DMPS Lite™ receiver to form a signal extender for HDMI®, RS-232, and IR signals. The DM Lite family of products offers a versatile solution for extending HD, UHD, 2K, and 4K video signals, with stereo or surround sound audio, over a single CAT5e (or higher) cable. A cable length of up to 230 ft (70 m) is supported for HD 1080p, WUXGA, and 2K signals, or up to 130 ft (40 m) for UHD and 4K. In addition to video and audio, the HD-TXC-101-C-1G-E supports the extension of RS-232 and IR control signals in either direction.¹

For applications requiring a surface-mountable version, refer to the <u>HD-TXC-101-C-E</u> product page. For applications that do not require IR or RS-232 signal extension, refer to the <u>HD-TX-101-C-1G-E-B-T</u> or <u>HD-TX-101-C-1G-E-W-T</u> product page.

The USB power port supplies power only (500 mA maximum) and is suitable for general use to power USB powered devices. No USB data is passed through this connection. It cannot be used to extend USB data, video, or audio signals.

The HD-TXC-101-C-1G-E series is available in black or white and is designed to mount in a single-gang electrical box or plaster ring (not included). When paired with a surface-mountable receiver, the HD-TXC-101-C-1G-E is powered by the receiver over the DM Lite link cable.²

NOTE: This product is not addressable from a control system and offers no programmable functionality when paired with an HD-RX-201-C-E or DMPS Lite receiver. Otherwise, AV, CEC, IR, and RS-232 signals are simply passed through between a single transmitter and receiver pair. The RJ-45 link port on this product is exclusively intended for linking with a single DM Lite or DMPS Lite receiver. It should not be used to connect to any other equipment or network. DM Lite technology is not compatible with PoE, PoDM, DigitalMedia 8G+®, or HDBaseT® technology.



Digital Media[®]

HD-TXC-101-C-1G-E Series

DM Lite® Transmitter for HDMI®, IR and RS-232 Signal Extension over CATx Cable, Wall Plate

Specifications

Video

HDMI with Deep Color, 3D, and 4K (DVI and Input Signal Types

Dual-Mode DisplayPort™ interface

compatible³)

Сору HDCP 2.2

Protection

Maximum Common resolutions are listed in the following

Resolution table.

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K and 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD 1080p	60 Hz	4:4:4	36 bit
Interlaced	1920x1080 HD 1080i	30 Hz	4:4:4	36 bit

NOTE: Common resolutions are shown: other custom resolutions are supported at pixel clock rates up to 300 MHz.

Audio

HDMI (Dual-Mode DisplayPort interface Input Signal compatible³) Types

Formats Dolby Digital®, Dolby Digital EX, Dolby Digital

Plus, Dolby TrueHD, Dolby Atmos, DTS®, DTS ES, DTS 96/24, DTS HD High Res, DTS HD Master Audio, DTS:X, LPCM up to 8 channels

Communications

HDMI HDCP 2.2, EDID, CEC pass-through

RS-232 2-way serial pass-through up to 115.2k baud

(TD/RD only)

IR Bidirectional IR signal pass-through up to 60

DM Lite Link Proprietary link for connection between one

DM Lite transmitter and DM Lite or DMPS

Lite receiver only

Connectors

IR IN/OUT (1) 4-pin 3.5 mm detachable terminal block;

Comprises (1) IR input port and (1) IR output

IR IN is for connection from a Crestron IR control port or other IR signal source and

passes the IR input signal to the IR OUT port on

the receiver;

IR OUT is for connection to an IR emitter (IRP2,

sold separately) and transmits the IR signal

from the IR IN port on the receiver;

Supports IR up to 60 kHz

HDMI IN (1) HDMI Type A connectors, female;

HDMI digital video/audio input (DVI and Dual-Mode DisplayPort interface compatible³)

COM (1) 3-pin 3.5 mm detachable terminal block;

Bidirectional RS-232 port;

Passes RS-232 TD/RD data to/from the COM

port on the receiver; Supports up to 115.2k baud

(1) USB Type A connector, female; **POWER**

USB power port (500 mA maximum output); ONLY

Supplies power to USB powered device

TO RX (DM

(1) 8-pin RJ-45 connector, female, shielded; DM Lite link port for connection to a DM Lite Lite, Rear)

or DMPS Lite receiver¹

24 VDC 1.25A (Rear)

(1) 2-pin 3.5 mm detachable terminal block;

24 VDC power input

NOTE: A power pack is not included with the

HD-TX-101-C-1G-E. When the HD-TX-101-C-1G-E is paired with a surface-mountable receiver, the 24 VDC power input of the HD-TX-101-C-1G-E is not used. The power pack included with and connected to the surface-mountable receiver is used to power both the receiver and the

HD-TX-101-C-1G-E.2

Indicators

PWR (1) Green LED, indicates operating power is

supplied from the receiver via the DM Lite link or from a power pack via the 24 VDC input

(1) Green LED, indicates HDMI input signal **HDMIIN**

presence

TO RX (DM Lite)

(2) LEDs on RJ-45 connector, green LED indicates DM Lite link status, amber LED

indicates a valid video signal

Digital Media **

HD-TXC-101-C-1G-E Series

DM Lite® Transmitter for HDMI®, IR and RS-232 Signal Extension over CATx Cable, Wall Plate

Power

Power Pack (sold separately)

Input: 100-240 VAC, 50/60 Hz; Output: 1.25 Amps @ 24 VDC;

Model: TBA

NOTE: This power pack is required only when the HD-TXC-101-C-1G-E is paired with a wall plate receiver. When the HD-TXC-101-C-1G-E is paired with a surface-mountable receiver, the power pack included with and connected to the receiver is used to power both the receiver and the HD-TXC-101-C-1G-E.²

Environmental

Temperature 32° to 104° F (0° to 40° C)

Humidity 20% to 90% RH (non-condensing)

Heat 9.1 BTU/hr

Dissipation

Construction

Composition Metal housing and bracket with black or white

polycarbonate front label overlay

Mounting Mounts in a 1-gang (or larger) 2-1/4 inch (57

mm) deep U.S. electrical box or plaster ring

(not included)

Faceplate Requires a decorator-style faceplate (FP-G

series, sold separately)

Dimensions

 Height
 4.08 in (104 mm)

 Width
 1.81 in (46 mm)

 Depth
 1.97 in (50 mm)

Weight

5.33 oz (151 g)

Compliance

Regulatory HD-TXC-101-C-1G-E-B-T, **Models** HD-TXC-101-C-1G-E-W-T

UL® Listed for US and Canada, CE, IC, FCC Part 15 Class B

digital device

Maximum DM Lite Link Cable Lengths

Resolution	CAT5e (or higher), DM-CBL-ULTRA DM® Ultra Cable, or DM-CBL-8G DM 8G® Cable ¹	
1920x1080 FHD 1080p		
1920x1200 WUXGA		
1600x1200 UXGA	230 ft (70 m)	
2048x1080 DCI 2K		
2048x1152 QWXGA		
2560x1080 UWFHD		
2560x1440 WQHD		
2560x1600 WQXGA	130 ft (40 m)	
3840x2160 4K UHD		
4096x2160 DCI 4K		

Models

HD-TXC-101-C-1G-E-B-T

DM Lite® Transmitter for HDMI®, IR and RS-232 Signal Extension over CATx Cable, Wall Plate, Black Textured

HD-TXC-101-C-1G-E-W-T

DM Lite® Transmitter for HDMI®, IR and RS-232 Signal Extension over CATx Cable, Wall Plate, White Textured

Available Accessories

FP-G1-B-T

Decorator Style Faceplate, 1-Gang, Black Textured

FP-G1-W-T

Decorator Style Faceplate, 1-Gang, White Textured

HD-RXC-101-C-1G-E-B-T

DM Lite – HDMI $^{\circ}$ over CATx Receiver w/IR & RS-232, Wall Plate, Black Textured

HD-RXC-101-C-E

DM Lite – HDMI $^{\circ}$ over CATx Receiver w/IR & RS-232, Surface Mount

HD-RX-4K-210-C-E

DMPS Lite™ 4K Multiformat 2x1 AV Switch and Receiver

HD-RX-4K-410-C-E

DMPS Lite™ 4K Multiformat 4x1 AV Switch and Receiver

HD-RX-4K-410-C-E-SW4

DMPS Lite™ 4K Multiformat 4x1 AV Switch and Receiver with 4-Port Ethernet Switch

HD-RX-4K-510-C-E

DMPS Lite™ 4K Multiformat 5x1 AV Switch and Receiver



HD-TXC-101-C-1G-E Series

Digital Media^{**}

DM Lite® Transmitter for HDMI®, IR and RS-232 Signal Extension over CATx Cable, Wall Plate

HD-RX-4K-510-C-E-SW4

DMPS Lite $^{\text{TM}}$ 4K Multiformat 5x1 AV Switch and Receiver with 4-Port Ethernet Switch

DM-CBL-ULTRA-PC-5

DigitalMedia™ Ultra Patch Cable, 5 ft (1.5 m)

DM-CBL-ULTRA-PC-50

DigitalMedia™ Ultra Patch Cable, 50 ft (15 m)

DM-CONN-ULTRA-RECP-20

DigitalMedia™ Ultra Keystone RJ-45 Jack, 20-Pack w/Termination Tool

DM-RPP-K24

DigitalMedia™ 24-Port Keystone Patch Panel

DM-CBL-8G-NP-SP1000

DigitalMedia 8G™ Cable, Non-Plenum, 1000 ft spool

DM-CBL-8G-P-SP1000

DigitalMedia 8G™ Cable, Plenum, 1000 ft spool

DM-8G-CONN-WG-100

Connectors with Wire Guide for DM-CBL-8G DigitalMedia 8G™ Cable, 100-Pack

DM-8G-CRIMP-WG

Crimping Tool for DM-8G-CONN-WG-100

DM-CBL-ULTRA-NP-SP1000

DigitalMedia™ Ultra Cable, Non-Plenum Type CMR, 1000 ft spool

DM-CBL-ULTRA-P-SP1000

DigitalMedia™ Ultra Cable, Plenum Type CMP, 1000 ft spool

DM-CBL-ULTRA-LSZH-SP1000

DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen, 1000 ft spool (Available only in Europe)

DM-CONN-20

Connectors for DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack

CBL-HD-6

High-Speed HDMI® Cable, 18 Gbps, 6 ft (1.8 m)

CBL-HD-LOCK-8

Locking High-Speed HDMI® Cable, 10.2 Gbps, 8 ft (2.4 m)

CBL-HD-DVI-6

HDMI® to DVI Interface Cable, 6 ft

IRP2

IR Emitter

Notes:

1. For the DM Lite link cable, use Crestron DM-CBL-8G DigitalMedia 8G™ cable, Crestron DM-CBL-ULTRA DigitalMedia™ Ultra cable, or third-party CAT5e (or higher). The maximum cable length is 230 ft (70 m) for resolutions up to 2K or 130 ft (40 m) for higher resolution signals up to 4K. Refer to the "Maximum DM Lite Link Cable Lengths" table for a more detailed overview. Shielded cable and connectors are required when bundling multiple cables in a wire run, and are recommended for all applications to safeguard against unpredictable environmental electrical

- noise which may impact performance at resolutions above 1080p. Wire and cables are sold separately. DM Lite devices are not compatible with DigitalMedia 8G+, HDBaseT, PoE, PoDM, or any other CATx based interface or network
- For applications in which the HD-TXC-101-C-1G-E is paired with a 1-gang receiver (HD-RXC-101-C-1G-E), refer to Online Help Answer ID 1000168. A power pack must not be connected to both the transmitter and receiver simultaneously. DM Lite devices are not compatible with PoE or PoDM.
- The HDMI input requires an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. <u>CBL-HD-DVI</u> interface cables are available separately.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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.

Crestron, the Crestron logo, DigitalMedia, DigitalMedia 8G, DigitalMedia 8G+, DM, DM 8G, DM Lite, and DMPS Lite are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Dolby, Dolby Atmos, and Dolby Digital are either trademarks or registered trademarks of Dolby Laboratories in the United States and/or other countries. DTS, DTS HD, and DTS:X are either trademarks or registered trademarks of DTS, Inc. in the United States and/or other countries. HDBaseT is either a trademark or registered trademark of HDBaseT Alliance in the United States and/or other countries. HDMI and the HDMI Logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. DisplayPort is either a trademark or registered trademark of Video Electronics Standards Association in the United States and/or other countries. UL is either a trademark or registered trademark of Underwriters Laboratories, Inc. 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.

HOMI

Specifications are subject to change without notice.

©2020 Crestron Electronics, Inc.

Rev 09/28/20



DM Lite® Transmitter for HDMI®, IR and RS-232 Signal Extension over CATx Cable, Wall Plate

