

# HDMI Extension Cable (M1-1P0H)

## Stretch your HDMI Experience



### Description

The High Definition Multimedia Interface (HDMI) is a low cost, high quality graphics interface between an HDTV source and HDTV screen. Optical technology for this transmission stretches the performance beyond the limitations of copper wire with longer length, data security, negligible RFI/EMI and the elimination of costly analog distribution systems.

The M1-1P0H consists of a transmitter and a receiver, connected by bundled multi mode fibers. The Transmitter and Receiver connectors respectively have Opticis designed and manufactured 850nm VCSEL and PIN-PD arrays. By use of short adapter cable with female DVI-D and male DHMI, M1-1P0H is fully compatible with both HDMI and DVI.

The M1-1P0H offers DDC/HDCP interconnection and power management over copper wire with the R,G,B,Clk TMDs graphic data over four multi mode fibers. The cable can be any length up to 100m (326feet).

No external power is required as most A/V source provide at least 500mA of +5V voltage to the cable.

### Features

- ◆ Supports all HD standards up to 1080p.
- ◆ Supports all VESA resolutions up to WUXGA (1920 x1200), at 60Hz refresh rate with 1 pixel/clock mode.
- ◆ Hybrid cable with four multi mode fibers cables for the HDMI interface and embedded copper wires to support the DDC2B/HDCP, Hot Plug Detect and power management.
- ◆ Extends up to 100 meters (326 feet).
- ◆ **Compact** end connector design easily allows direct connect to the graphics source and display peripheral.
- ◆ No software to install; just plug and go.
- ◆ Data security with negligible RFI/EMI emissions.

### Applications

- ◆ Home Theatre Systems.
- ◆ Digital FPD, PDP and projector installation in conference rooms, auditoriums and for kiosk systems.
- ◆ Digital display system integration for medical, military, aerospace, factory automation, and traffic control platforms.
- ◆ LED signboards for large scale information display and stadiums.

# Optical HDMI Extension cable (M1-1P0H)

## Compliance with International Standards

M1-1P0H meets the requirements of North American FCC and European CE standards for RFI/EMI emissions, material ratings, and laser safety. Consult the product specification for further details.

**M1-1P0HE** uses an external AC/DC adapter to enable the supply of +5V to the transmitter and receiver modules where the +5V A/V source power is judged to be inadequate or non-existent. If the graphic source can provide 500mA of +5V to pin 18, this option is unnecessary.

**Custom Lengths** 10m, 20m, 30m, 50m and 100m are standard stock lengths. Other lengths up to 100m can be ordered from the factory.

## Recommended Operating Conditions

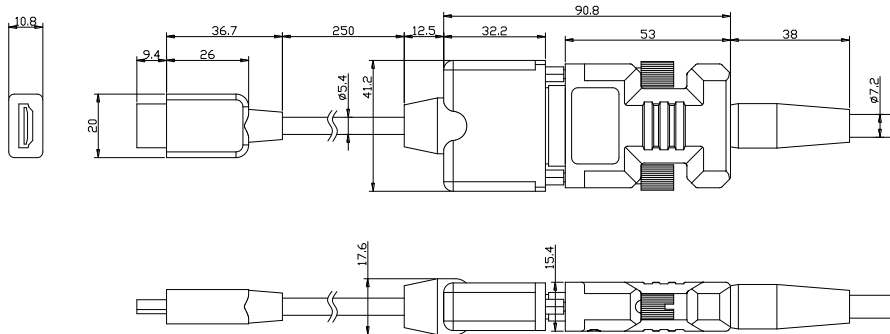
Parameter	Symbol	Min	Typ	Max	Units
Ambient Operating Temperature	$T_A$	0	25	+ 50	°C
Storage Temperature	$T_s$	-30		+ 70	°C
Storage Humidity	$H_s$	10		85	RH%

## Electrical Power Supply Characteristics

( $T_A = 0\text{ °C}$  to  $+50\text{ °C}$ , unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Units	
Supply Voltage	$V_{CC}$	4.5	5	5.5	V	
Supply Current	TX	$I_{TCC}$	-	170	200	mA
	RX	$I_{RCC}$	-	130	150	mA
Power Dissipation	TX	$P_{TX}$		0.85	1.1	W
	RX	$P_{RX}$	-	0.75	0.825	W

Drawing  
Dimension [mm]



## Ordering Information

Model number: M1-1P0H-xxx, where xxx = length in meters. Standard lengths are 10, 20, 30, 50 and 100 meters.



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