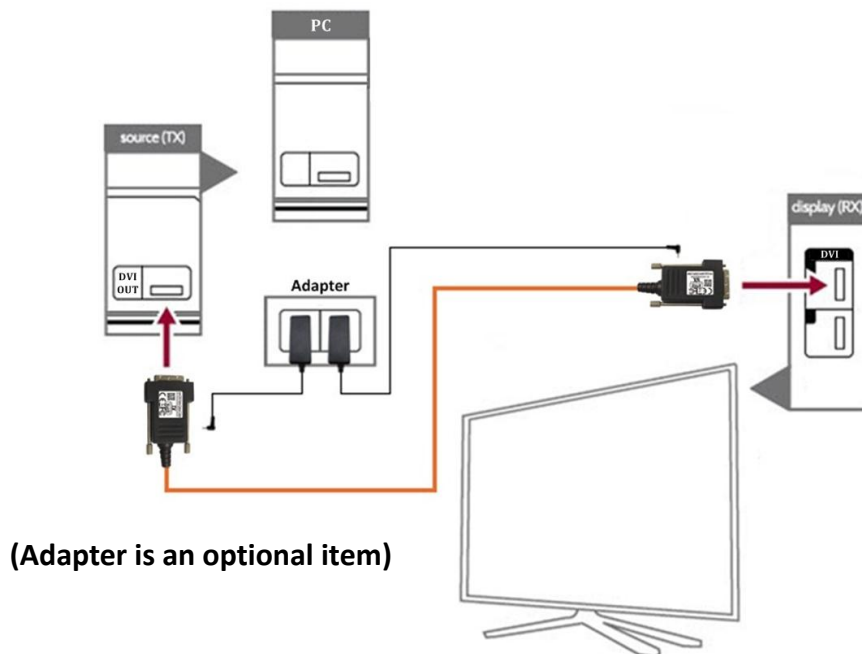
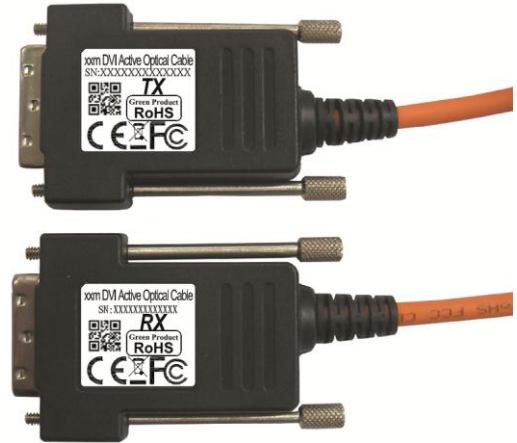


DVI Hybrid Active Optical Cable (U-DVI-H)

Description

UMEC U-DVI-H can extend DVI transmission distance up to 100m (330ft) with a hybrid cable. It consists of optical fibers and copper wires. Fibers are responsible for transmitting R, G, B and Clock signal. Copper wires transmit control signal and power. At each end of the cable is a standard DVI-D male plug. One side is a transmitter connected to the source device (ex. PC host) and the other side is a receiver connected to the sink device (ex. monitor).

The most benefits of the optical fiber are great transmission bandwidth, low power consumption and immune to environmental signal noise. It is suitable for high speed, high quality and long distance multimedia transmission applications or systems.



Models

U-DVI-H-xxx (xxx : 001 ~ 100 meters)

Standard Length : 10 、 20 、 30 、 40 、 50 、 60 、 70 、 80 、 90 、 100

Features

- Supports deep color 24, 30, 36 and 48.
- Supports DVI-D (Single Link) resolutions up to 1080p.
- Supports PC resolutions up to 1600 x 1200 and 1920 x 1200.
- Supports digital bit-rates up to 4 x 5G Bit / sec (R, G, B and Clock).
- Uses 850nm laser optical transmission technology.
- Fully compliant EDID and HDCP.
- Immune to environmental signal noise.
- Has low RFI / EMI profile and suits for sensitive application.
- Powered by DVI source or used optional +5VDC external power supply. (adapter is an optional item)
- The maximum transmission distance can reach 150m.

Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Supply Voltage	V_{CC}	-0.3	6	V
Differential Input Voltage	V_D		1.2	V
Storage Temperature	T_{st}	-20	70	°C
Relative Humidity	RH	10	80	%

Recommended Operating Conditions

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Supply Voltage	V_{CC}	+4.5	+5.0	+5.5	V
Data Output Load	R_L		50		
Ambient Temperature	T_A	0		+50	°C

Electrical Power Supply Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Supply Voltage	V_{CC}	+4.5	+5.0	+5.5	V
Supply Current	Tx	I_{TCC}	60		mA
	Rx	I_{RCC}	120		mA
Power Dissipation	Tx	P_{TX}	0.3		W
	Rx	P_{RX}	0.65		W

*Power adapter might be needed only if source devices cannot provide 5V 250mA.

Hybrid Cable Specifications

Parameter	Value
Cable Jacket material	LSZH PE
Color	Orange
Optical Fiber	62.5 / 125 Multimode Fiber
Output Diameter	4.7 ± 0.3 mm
Minimum Bending Radius	94 mm
Maximum Tensile Load	10 kg
Net Weight	30 g / meter

Applications

- Digital home theatre.
- Plasma, TFT-LCD, and all types of projectors.
- Medical or scientific image transmission.
- TV broadcast station.
- The LED signboard and panel information displays for airports, stadiums, outdoor advertisements, auditoriums, hospitals, department stores, train stations, and so on.
- Conference video system for large conference hall.
- Airplane on-board video system.
- Car service center big screen show video system.

