



Superior Performance – DVI Gear’s High Resolution™ (HR™) Series DVI and HDMI cables are engineered for superior performance, durability, and value. These cables are capable of supporting high resolution DVI and HDMI signals with cable lengths of up to 10 meters (32.8 ft.).

High-Speed Signals – Long distance transport of high resolution DVI and HDMI signals over copper cables must overcome several challenges, such as insertion loss, differential skew and jitter. Insertion loss is caused by cable capacitance, which acts as a low-pass filter, blocking higher frequency signal components from passing. Skew occurs when the differential DVI and HDMI signals get delayed and become out of phase as they pass over a long cable. Both factors contribute to increased digital jitter, which degrades the performance of the cable. This jitter becomes more severe with higher resolutions and longer cable distances. Conventional cables that support lower resolutions at short distances are often unable to support the data rates required by higher resolutions at longer distances. The resulting video can be disrupted by visual artifacts or may not be visible at all.

Advanced Design – Built to overcome these challenges, the HR™ Series DVI and HDMI Cables are constructed using heavy gauge 24AWG copper wires. This increases the cross-sectional cable area and decreases the capacitance of the cables, which allows signals with higher data rates to pass without noise and minimal jitter. These features make DVI Gear HR™ Series copper cables the ideal solution for applications that require a cost effective solution with flawless signal quality.

FEATURES

- Supports HDTV resolutions up to 1080p with 12-bit color
- Supports PC resolutions up to 1920x1200 and 2048x1080
- Supports HDMI data rates up to 3.4 Gbps. at lengths up to 5m
- Supports HDMI data rates up to 2.25 Gbps. at lengths up to 10m
- Supports PC data rates up to 1.65 Gbps.
- Heavy-duty 24AWG copper wires provide minimal insertion loss
- Ultra-low Skew guarantees unsurpassed digital fidelity
- Triple shielded for superior noise immunity
- Dual UL Ratings: UL13 (CL2) and UL758 (AWM20276). These cables are in-wall rated.



DVI-D to DVI-D



HDMI to DVI-D



HDMI to HDMI

SPECIFICATIONS

Model	DVI-23xx-HR	DVI-24xx-HR	DVI-25xx-HR
Product Designation	High Resolution™ (HR™)		
Product Description	24AWG Single-Link DVI-D Cables	24AWG HDMI to DVI-D Cables	24AWG (Standard) HDMI Cables
Connectors			
Input / Output Connectors	18+1 DVI Male Connectors	1x 19-pin HDMI Male Connector, 1x 18+1 DVI Male Connector	19-pin HDMI Male Connectors
Contacts	19 pins, 30µ Gold Plated, long life design		
Shell	Gold Flash Plated		
Performance			
Standards Compliance	DVI 1.0, HDMI 1.3		
Maximum Pixel Clock Frequency	165 MHz - up to 10 meters, 225 MHz - up to 10 meters, 340 MHz - up to 5 meters		
Maximum Bit Rate (per Channel)	1.65 Gbps - up to 10 meters, 2.25 Gbps - up to 10 meters, 3.40 Gbps - up to 5 meters		
Maximum Bit Rate (Aggregate)	4.95 Gbps - up to 10 meters, 6.75 Gbps - up to 10 meters, 10.2 Gbps - up to 5 meters		
Supported HDTV Resolutions	1080p / 60 Hz with 8, 10 and 12-bit color		
Supported Single-Link PC Resolutions	up to 2048x1080, 1920x1200		
Cable Equalization	None		
Typical Parametric Data			
Voltage Rating	75 V		
Differential Impedance	100 ohms ± 5%		
Insertion Loss (SDD21)	< 7.5 dB @ 825 MHz with 10 meter cable		
Intra-pair Skew	< 1.5 nsec (from 250 MHz - 2.5 GHz) with 10 meter cable		
Inter-pair Skew	< 100 psec (from 250 MHz - 2.5 GHz) with 10 meter cable		
Far End Crosstalk (FEXT)	< -5 dB		
Propagation Delay	4.55 nsec/meter		
Cable Lengths			
Available Cable Lengths (meters) ⁽¹⁾⁽²⁾	0.2, 0.5, 0.6, 1, 2, 3, 5, 7.5, 10		
Available Cable Lengths (ft.) ⁽¹⁾⁽²⁾	0.6, 1.6, 2.0, 3.3, 6.6, 9.8, 16.4, 24.6, 32.8		
Maximum Cable Length ⁽¹⁾	10 meters (~ 32.8 ft.)		
Mechanical			
Construction	19 Conductor Cable with 4x high speed twisted pairs		
High Speed Conductors	24AWG, FM-PE+SKIN Construction		
Shielding	Triple Shielding		
Jacket Material / Color	PVC / Red (PMS 209c)		
Outside Diameter	10.50 ±0.20 mm		
Minimum Bend Radius	40.0 mm		
Environmental			
Operating Temperature	-13° to 140° F (-25° to 60°C)		
Storage Temperature	-40° to 167° F (-40° to 75°C)		
Humidity (storage / operating)	10% to 90% (non-condensing)		
Regulatory Approvals			
Compliance	UL13 (CL2), UL758 (AWM20276), RoHS		
UL File Numbers	AVLV2.E245407, AVLV8.E245407, QPTZ.E245576		
Warranty			
Limited Warranty	3 Years		
Accessories Included			
None			

Note 1: For longer cable lengths, please use DVI Gear's Super High Resolution (SHR™) cables.

Note 2: 0.2 meter (0.6 ft.) cable length only available with DVI-D HR™ cables.