



Superior Performance – DVI Gear's Super High Resolution™ (SHR™) DVI and HDMI cables are engineered for unsurpassed performance and reliability in mission critical applications. These cables are designed to transport high speed digital DVI and HDMI signals with bit rates up to 3.4 Gbps. over very long distances while maintaining pristine signal / bit integrity.

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 SHR™ Series DVI and HDMI Cables are constructed using heavy gauge 22AWG 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 with minimal jitter. When coupled with DVI Gear's Active Cable Extenders (ACE™), cable lengths of up to 200 ft. (~ 60 meters) are possible while maintaining full compliance with DVI and HDMI signal parameters. The combination of these products are active copper cables with minimal insertion loss and skew. These cables rival the performance of fiber cables at a fraction of the cost, while providing superior ruggedness and durability.

FEATURES

- Cables 20m or longer include DVI Gear's ACE™ (Active Cable Extender)
- Supports HDTV resolutions up to 1080p with 12-bit color
- Supports PC resolutions up to 1920x1200 and 2048x1080 at cable lengths up to 60m
- Supports HDMI data rates up to 3.4 Gbps. at lengths up to 7.5m
- Supports HDMI data rates up to 2.25 Gbps. at lengths up to 40m
- Supports PC data rates up to 1.65 Gbps. at lengths up to 60m
- Heavy-duty 22AWG 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-SHR	DVI-24xx-SHR	DVI-25xx-SHR
Product Designation	Super High Resolution™ (SHR™)		
Product Description	22AWG Single-Link DVI-D Cables	22AWG HDMI to DVI-D Cables	22AWG (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 60 meters, 225 MHz - up to 40 meters, 340 MHz - up to 7.5 meters		
Maximum Bit Rate (per Channel)	1.65 Gbps - up to 60 meters, 2.25 Gbps - up to 40 meters, 3.40 Gbps - up to 7.5 meters		
Maximum Bit Rate (Aggregate)	4.95 Gbps - up to 60 meters, 6.75 Gbps - up to 40 meters, 10.2 Gbps - up to 7.5 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	DVI Gear's Active Cable Extender (ACE™) is included with cables 20 meters (~ 65.6 ft.) and longer		
Typical Parametric Data			
Voltage Rating	75 V		
Differential Impedance	100 ohms ± 5%		
Insertion Loss (SDD21)	< 32 dB @ 825 MHz with 60 meter cable		
Intra-pair Skew	< 2.2 nsec (from 250 MHz - 2.5 GHz) with 60 meter cable		
Inter-pair Skew	< 150 psec (from 250 MHz - 2.5 GHz) with 60 meter cable		
Far End Crosstalk (FEXT)	< -20 dB		
Propagation Delay	4.55 nsec/meter		
Cable Lengths			
Available Cable Lengths (meters) ⁽¹⁾⁽²⁾	0.2, 0.5, 1, 2, 3, 5, 7.5, 10, 12.5, 15, 20, 25, 30, 35, 40, 45, 50, 60		
Available Cable Lengths (ft.) ⁽¹⁾⁽²⁾	0.6, 1.6, 3.3, 6.6, 9.8, 16.4, 24.6, 32.8, 41.0, 49.2, 65.6, 82.0, 98.4, 114.8, 131.2, 147.6, 164.0, 196.9		
Maximum Cable Length	200 ft. (~ 60 meters)		
Mechanical			
Construction	19 Conductor Cable with 4x high speed twisted pairs		
High Speed Conductors	22AWG, FM-PE+SKIN Construction		
Shielding	Triple Shielding		
Jacket Material / Color	PVC / Blue (PMS 301c)		
Outside Diameter	11.50 ±0.20 mm		
Minimum Bend Radius	43.5 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			
DVI Gear's Active Cable Extender (ACE™) is included with cables 20 meters (~ 65.6 ft.) and longer			

Note 1: Active Cable Extender™ included with all cables 20 meters (~ 65.6 ft.) and longer. Depending on application requirements, either HDMI or DVI Single-Link ACE™ unit may be selected.

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