



Superior Performance – DVI Gear’s Dual-Link DVI cables are engineered for unsurpassed performance and reliability in mission critical applications. These cables are designed to transport high resolution digital Dual-Link DVI signals with bit rates up to 3.30 Gbps. over very long distances while maintaining pristine signal / bit integrity.

High-Speed Signals – Long distance transport of high resolution Dual-Link DVI 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 Dual-Link DVI signals are 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 SHRD™, HRD™, and SRD™ Series Dual-Link DVI Cables are constructed using heavy gauge copper wires up to 22AWG. 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 Extender (ACE™), cable lengths of up to 200 ft. (~ 60 meters) are possible while maintaining full compliance with Dual-Link DVI 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 15 meters (~50 ft.) or longer include DVI Gear’s ACE™ (Active Cable Extender)
- SHRD™ cables support PC resolutions up to 3840x2400 / 60 Hz at cable lengths up to 60m
- SHRD™ cables support data rates up to 3.30 Gbps. at lengths up to 60m
- Heavy-duty copper wires up to 22AWG provide minimal insertion loss
- Choose from 22AWG, 26AWG, and 28AWG cables for application specific cable flexibility
- 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.



Super High Resolution (SHRD™)



High Resolution (HRD™)



Standard Resolution (SRD™)

SPECIFICATIONS

| Model | DVI-23xx-SHRD | DVI-23xx-HRD | DVI-23xx-SRD |
|---|---|---|--|
| Product Designation | Super High Resolution™ (SHRD™) | High Resolution™ (HRD™) | Standard Resolution™ (SRD™) |
| Product Description | 22AWG Dual-Link DVI-D Cables | 26AWG Dual-Link DVI-D Cables | 28AWG Dual-Link DVI-D Cables |
| Connectors | | | |
| Input / Output Connectors | 24+1 DVI Male Connectors | | |
| Contacts | 25 pins, 30µ Gold Plated, long life design | | |
| Shell | Gold Flash Plated | | |
| Performance | | | |
| Standards Compliance | DVI 1.0 (Single-Link and Dual-Link) | | |
| Maximum Pixel Clock Frequency | 165 MHz | | |
| Maximum Bit Rate (per Channel) | 1.65 Gbps | | |
| Maximum Bit Rate (Aggregate) | 4.95 Gbps | | |
| Supported HDTV Resolutions | up to 1080p / 60 Hz with 8-bit color | | |
| Supported PC Resolutions | Single-Link: up to 2048x1080, 1920x1200; Dual-Link: up to 3840x2400 | | |
| Cable Equalization | ACE™ included with cables 15 m (~ 49.2 ft.) and longer ⁽¹⁾ | None | |
| Typical Parametric Data | | | |
| Voltage Rating | 75 V | | |
| Differential Impedance | 100 ohms ± 5% | | |
| Insertion Loss (SDD21) | < 32 dB @ 825 MHz with 60 meter cable | < 7.5 dB @ 825 MHz with 10 meter cable | < 7.0 dB @ 825 MHz with 7.5 meter cable |
| Intra-pair Skew | < 2.2 nsec (from 250 MHz - 2.5 GHz) with 60 meter cable | < 1.5 nsec (from 250 MHz - 2.5 GHz) with 10 meter cable | < 1.5 nsec (from 250 MHz - 2.5 GHz) with 7.5 meter cable |
| Inter-pair Skew | < 150 psec (from 250 MHz - 2.5 GHz) with 60 meter cable | < 100 psec (from 250 MHz - 2.5 GHz) with 10 meter cable | < 100 psec (from 250 MHz - 2.5 GHz) with 7.5 meter cable |
| Far End Crosstalk (FEXT) | < -20 dB | < -5 dB | < -5 dB |
| Propagation Delay | 4.55 nsec/meter | 4.55 nsec/meter | 4.55 nsec/meter |
| Cable Lengths | | | |
| Available Cable Lengths (meters) ⁽¹⁾ | 0.5, 1, 2, 3, 5, 7.5, 10, 12.5, 15, 20, 25, 30, 35, 40, 45, 50, 60 | 0.3, 0.5, 1, 2, 3, 5, 7.5, 10 | 0.4, 0.5, 1, 2, 3, 5, 7.5 |
| Available Cable Lengths (ft.) ⁽¹⁾ | 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 | 1.1, 1.6, 3.3, 6.6, 9.8, 16.4, 24.6, 32.8 | 1.3, 1.6, 3.3, 6.6, 9.8, 16.4, 24.6 |
| Maximum Cable Length | 60 meters (~ 200 ft.) | 10 meters (32.8 ft.) | 7.5 meters (24.6 ft.) |
| Mechanical | | | |
| Construction | 26 Conductor Cable with 7x high speed twisted pairs | | |
| High Speed Conductors | 22AWG, FM-PE+SKIN Construction | 26AWG, FM-PE+SKIN Construction | 28AWG, FM-PE+SKIN Construction |
| Shielding | Triple Shielding | | |
| Jacket Material / Color | PVC / Metallic Gray (Pantone 8401C) | | |
| Outside Diameter | 14.00 ± 0.30 mm | 10.50 ± 0.30 mm | 9.0 ± 0.20 mm |
| Minimum Bend Radius | 53.0 mm | 40.0 mm | 34.0 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 | ACE™ included with cables 15 m (~ 49.2 ft.) and longer ⁽¹⁾ | None | |

Note 1: DVI-7176b DVI Dual-Link Active Cable Extender™ included with all cables 15 meters (~ 49 ft.) and longer.