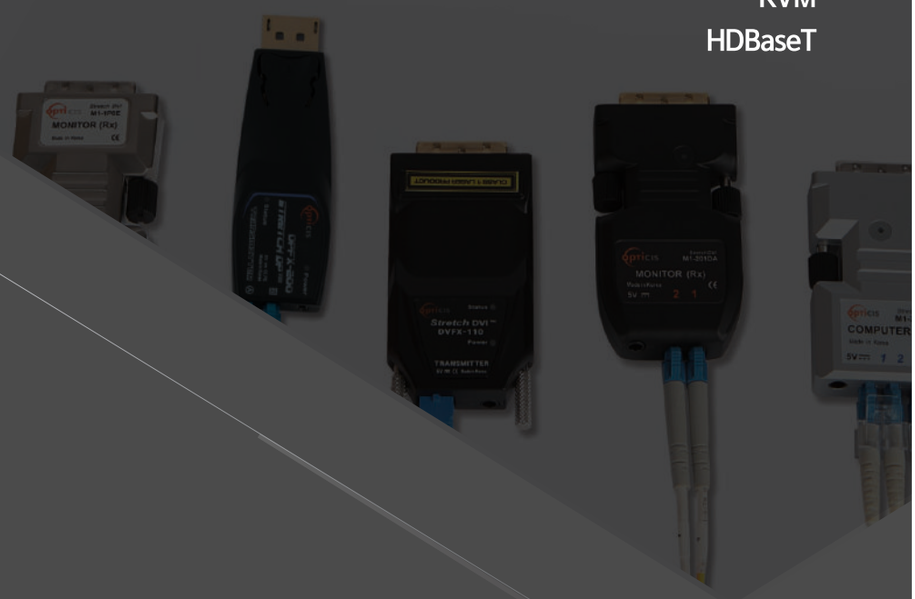
Opticis

Connectivity for Video · Audio · Data

Fiber-optic Extension Link
(DVI / HDMI / DisplayPort / SDI)
Active Optical Cable
IP Solution
Multi-format Modular Matrix
Video Format Converter
KVM
HDBaseT



OPTICIS
WWW.OPTICIS.COM

About OPTICIS

Opticis Co., Ltd., the innovative provider of fiber-optic extenders for video & audio connectivity, located in Sungnam-city of South Korea, was founded in December, 1999. Opticis designs and manufactures a variety of fiber-optic digital links of quality, being especially applied for long-distance extensions, simple connections and no electric noises to medical imaging, digital signage, education/government, military/avionics and broadcast.

With a rich technical expertise in fiber-optic components and associated applications, Opticis aims to provide high-speed fiber-optic link solutions for digital video & audio extension and distribution, splitting and matrix routing mainly along with serial data interface and interconnection required in video & audio industry to assure the increased demand of the diversified use in graphic sources.

The Opticis technologies offer you the benefit to combine single to multiple networking and fulfill the ultimate performance with easy-setting features through the multiplicity of the setting methods. In this field, the connectivity issue becomes more especially critical for environmentally cautious, high-speed and long extension applications, where copper cables support only several meters. In such areas, Opticis has been implementing various interface standards such as the Digital Visual Interface (DVI) for PC-based graphic interface and the High-Definition Multimedia Interface (HDMI) for digital TV industry, DisplayPort for PC and display, Serial Digital Interface (SDI) for Broadcast system, the Universal Serial Bus (USB) for PC Peripherals, HDBaseT for Digital Signage and IP solution (KVM and Video Wall Controller) for Control Room system and Video Wall solution.

Not limited to fields in technology, Opticis has the management team represented extensive experiences in business area. With its leadership, the Quality Management System has been certified, assessed and complied with the requirements of the quality standard, by ISO 9001 and certified in environmentally well-process, ISO 14001.

As a leader in a field of fiber-optic extenders, Opticis keeps simplifying connectivity by combining or multiplexing various interface data into an optical data and continues to offer new fiber-optic link products to meet the needs of wide bandwidth data transmission and applications. As we have been doing, we commit to deliver products of quality to our customers with certified standards from two ISOs' as well as to innovate video & audio industry with fiber-optic technology.

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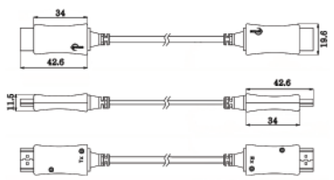
Fiber-optic Extension Link

- Extremely long-distance
- Clean installation
- Free from electrical noise
- Galvanic isolation
- Simple connection

Opticis fiber-optic extension solution including DVI, HDMI, SDI, DisplayPort and USB will meet the requirement of various industries and customers making a strong move for simple, reliable and crystal clear quality of signal transmission with powerful features to transmit longer distances and an ability to accommodate a full compatibility and intelligent management of all devices within an integrated system.

Stretch HDMI™ : Active Optical Cable

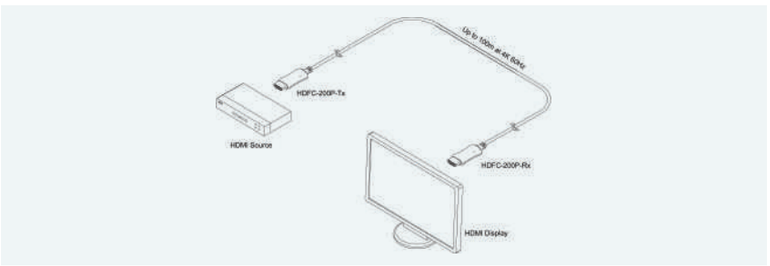
HDFC-200P ; Active Optical Cable for HDMI 2.0



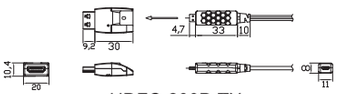
Drawing Dimension [mm]

- Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4).
- Transmits HDMI 2.0 signal up to 100m (328feet) over hybrid cable.
- Adopts plenum graded (or LSZH - Low Smoke Zero Halogen) hybrid cable.
- Supports 3D contents transmission.
- Supports HDMI 2.0 standards feature.
- Complies with CEC, EDID, and HDCP 2.2.
- Supports HDR at 10 bit or 12 bit speed respectively within its maximum bandwidth, 18 Gbps.

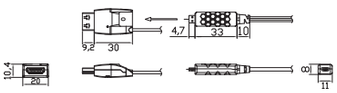
Ordering information : HDFC-200P-xx, where xx = Length in meters
Standards lengths are 10, 15, 20, 30, 40, 50, 70 and 100m



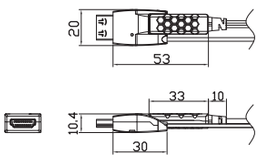
HDFC-200D ; Detachable Active Optical Cable for HDMI 2.0



HDFC-200D TX



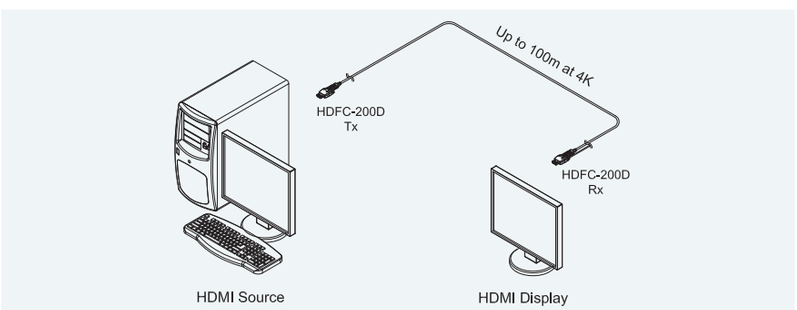
HDFC-200D RX



Drawing Dimension [mm]

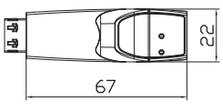
- Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4).
- Transmits HDMI 2.0 signal up to 100m (328feet) over hybrid cable.
- Adopts plenum graded (or LSZH - Low Smoke Zero Halogen) hybrid cable.
- Prevents accidental disconnection by using High-Retention HDMI connector.
- Offers perfect flexibility during installation by separating HDMI connector from the cable.
- Supports 3D contents transmission.
- Supports HDMI 2.0 standards feature.
- Complies with CEC, EDID, and HDCP 2.2.
- Operates by external USB power on the display (RX) side.
- Offers optional USB power cable on the source (TX) side upon request.
- Supports HDR at 10 bit or 12 bit speed respectively within its maximum bandwidth, 18 Gbps.

Ordering information: HDFC-200D-xx, where xx = Length in meters
Standards lengths are 10, 15, 20, 30, 40, 50, 70 and 100m



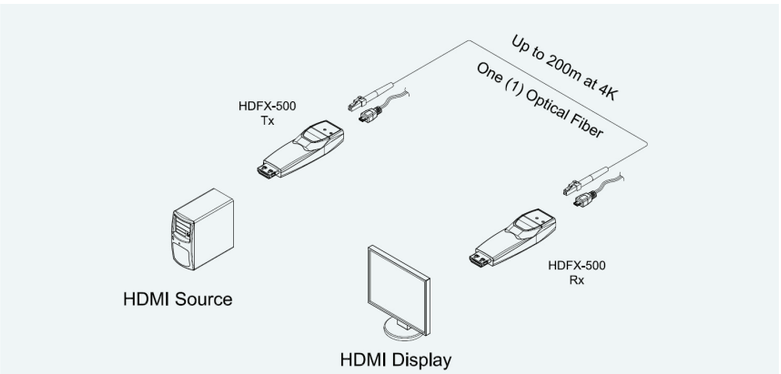
Stretch HDMI™ : Small Module

HDFX-500-TR ; One (1) fiber Optical HDMI 2.0 Extension Module

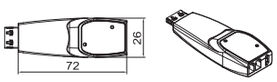


Drawing Dimension [mm]

- Supports HDMI 2.0 standards feature.
- Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4).
- Transmits HDMI 2.0 signal up to 200m (656feet) over one LC multi-mode fiber(OM3).
- Prevents accidental disconnection by using High-Retention HDMI connector.
- Operated by either 5V from HDMI source or USB power.
- Supports 3D contents transmission.
- Provides Auto Power-Switching feature.
- Supports HDR at 10 bit or 12 bit speed respectively within its maximum bandwidth, 18 Gbps.
- Complies with CEC, EDID and HDCP 2.2.

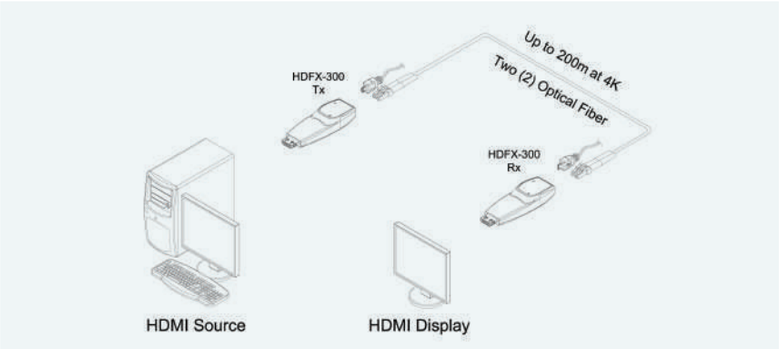


HDFX-300-TR ; Two (2) fiber Optical HDMI 2.0 Extension Module



Drawing Dimension [mm]

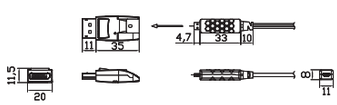
- Supports HDMI 2.0 standards feature.
- Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4).
- Transmits HDMI 2.0 signal up to 200m (656 feet) over two (2) LC multi-mode fibers(OM3).
- Prevents accidental disconnection by using High-Retention HDMI connector.
- Operates by either 5V from HDMI source or USB power.
- Provides Auto Power-Switching feature.
- Provides diagnosis feature.
- Supports 3D contents transmission.
- Complies with CEC, EDID and HDCP 2.2.
- Supports HDR at 10 bit or 12 bit speed respectively within its maximum bandwidth, 18 Gbps.



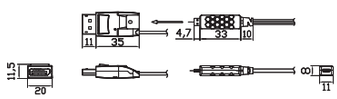
Stretch DisplayPort™ : Active Optical Cable

DPFC-200D ; Detachable Active Optical Cable for DisplayPort 1.2

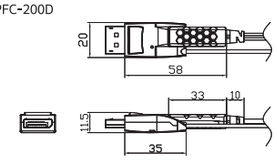
DPFC-200D-TX



DPFC-200D-RX



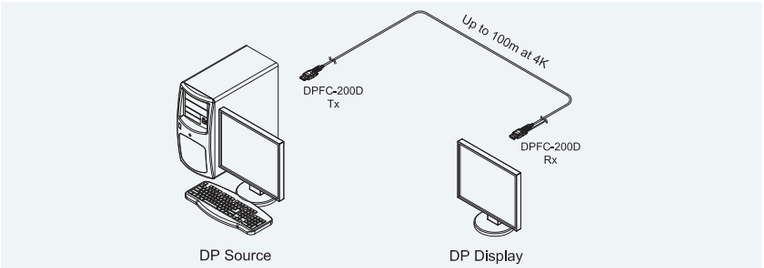
DPFC-200D



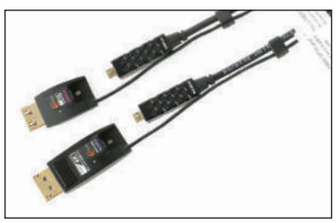
Drawing Dimension [mm]

- Extends up to 4K (3840x2160) at 60Hz (RGB & YCbCr : 4:4:4).
- Transmits DisplayPort 1.2 signal up to 100m (328feet) over hybrid cable.
- Adopts plenum graded (or LSZH - Low Smoke Zero Halogen) hybrid cable.
- Offers total data rate 21.6Gbps (5.4Gbps per lane).
- Offers perfect flexibility during installation by separating DisplayPort connector from the cable.
- Supports 3D contents transmission.
- Supports DisplayPort 1.2 standards feature.
- Supports Auxiliary /I²C channel.
- Offers optional USB power cable on source (TX) and/or display (RX) side upon request.

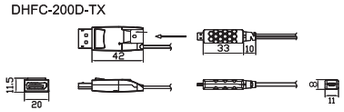
Ordering information : DPFC-200D-xx
where xx = Length in meters
Standards lengths are 5, 7, 10, 15, 20, 30, 40, 50, 70 and 100m



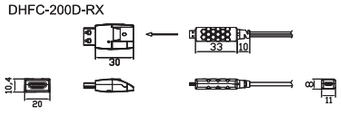
DHFC-200D ; DisplayPort 1.2 to HDMI 2.0 Converting (Detachable) Active Optical Cable



DHFC-200D-TX

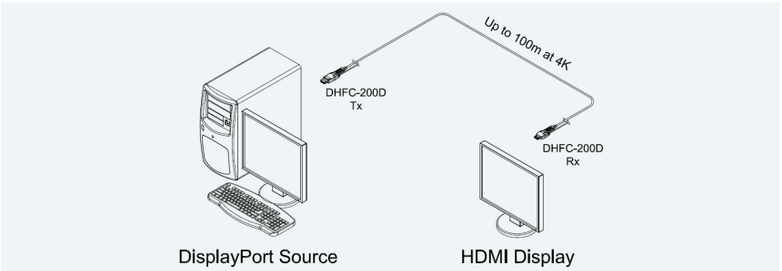


DHFC-200D-RX



Drawing Dimension [mm]

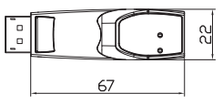
- Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4).
- Converts DisplayPort 1.2 signal to HDMI 2.0 signal and transmits converted signal up to 100m (328feet) over hybrid cable.
- Adopts plenum graded (or LSZH - Low Smoke Zero Halogen) hybrid cable.
- Offers total data rate 21.6Gbps (5.4Gbps per lane).
- Offers perfect flexibility during installation by separating DisplayPort and HDMI connector from the cable.
- Prevents accidental disconnection by using High-Retention HDMI connector(Rx) and DisplayPort connector(Tx).
- Supports 3D contents transmission.
- Supports CEC, EDID and HDCP 2.2.



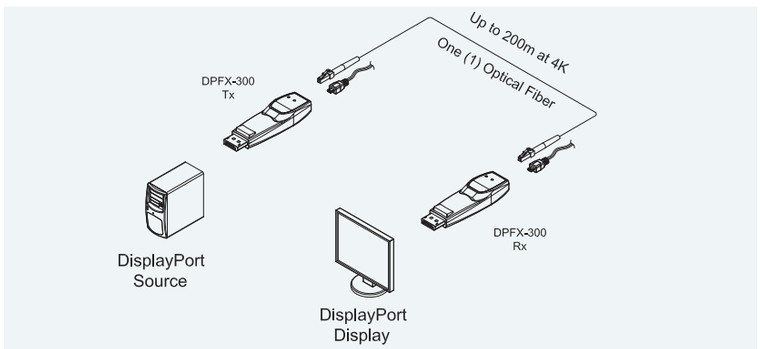
Stretch DisplayPort™ : Small Module

DPFX-300-TR ; One (1) fiber Optical DisplayPort 1.2 Extension Module

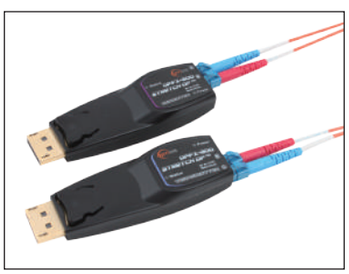
- Supports DisplayPort 1.2 standards feature.
- Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4).
- Offers total data rate 21.6Gbps (5.4Gbps per lane).
- Transmits DisplayPort 1.2 signal up to 200m (656 feet) over one LC multi-mode fiber(OM3).
- Supports Dual-mode DP (DP++).
- Offers Auto-power switching.
- Supports MST (Multi-Stream Transport).
- Supports Auxiliary / I²C channel over fiber.
- Operated by USB power or DC power supplier.
- Adopts up to eight (8) units using *BR-500.



Drawing Dimension [mm]

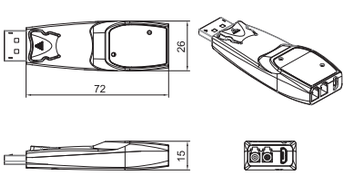


DPFX-200-TR ; Fiber-optic DisplayPort 1.2 Extension Module

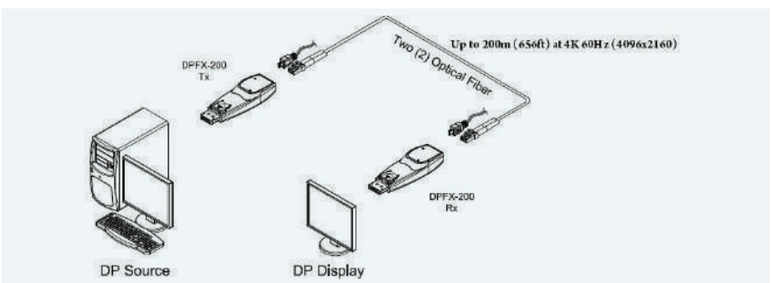


- Supports 4K and DisplayPort 1.2 standards.
- Extends WQUXGA (3840x2400) at 60Hz DisplayPort signal up to 200m (656 feet) over two (2) LC multi-mode fibers.
- Offers total data rate 21.6Gbps (5.4Gbps per lane).
- Supports Smart control function by GUI.
- Dual-mode DP (DP++).
- Supports Auxiliary / I²C channel over fiber.
- Supports Multi-Stream transport.
- Operated by USB power or DC power supplier.
- Includes two (2) +5V DC power adapters and two (2) USB to DC plug cables for the Transmitter (Tx) and Receiver (Rx).
- Offers Auto-power switching.
- Adopts up to eight (8) units using *BR-500.

Housing Option: Chrominum Housing available.

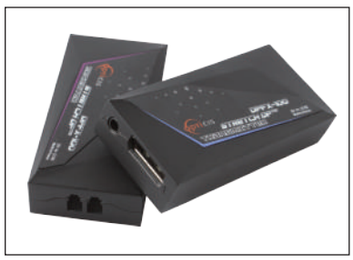


Drawing Dimension [mm]

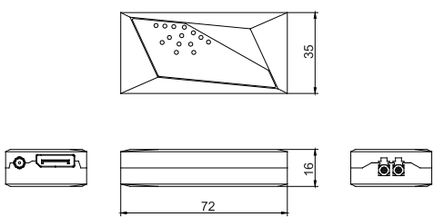


Stretch DisplayPort™ : Small Module

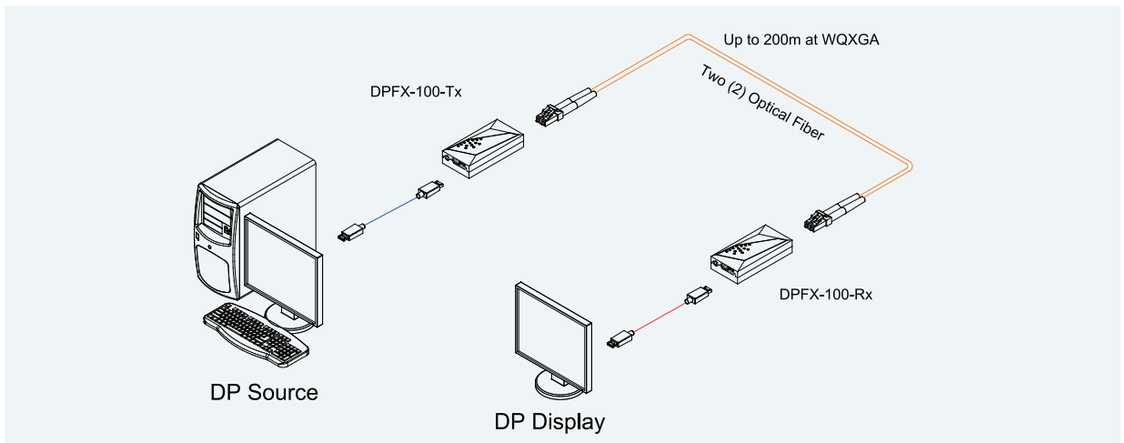
DPFX-100-TR ; Fiber-optic DisplayPort 1.1 Extension Module



- Supports DisplayPort 1.1a standards.
- Extends WQXGA (2560x1600) at 60Hz DisplayPort signal up to 200m (656 feet) over two (2) LC multi-mode fibers.
- Offers total data rate 10.8Gbps (2.7Gbps per lane).
- Supports Dual-mode DisplayPort (DP++).
- Supports auxiliary / I²C channel over fiber.
- Has DisplayPort receptacle and provides intermediate cable for flexible installation.
- Operated by USB power or DC power supplier.

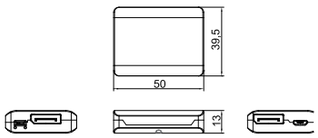


Drawing Dimension [mm]



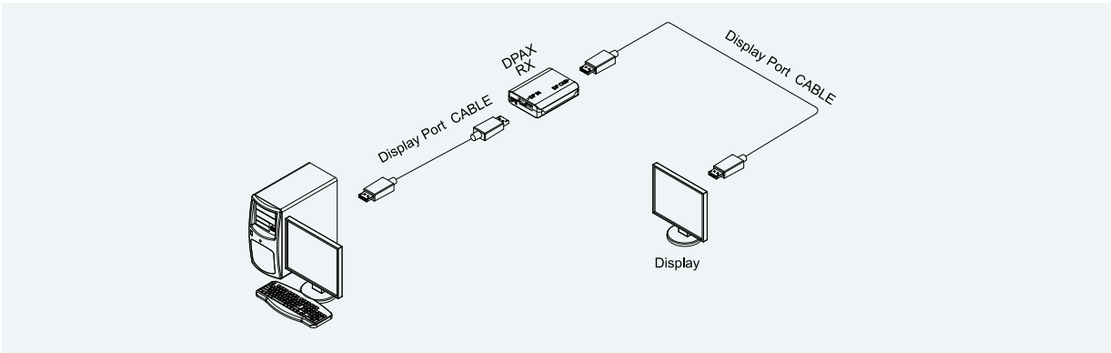
Stretch DisplayPort™ : Repeater

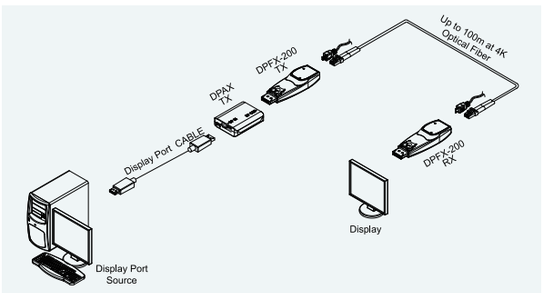
DPAX ; DisplayPort 1.2 Data Recovery Repeater

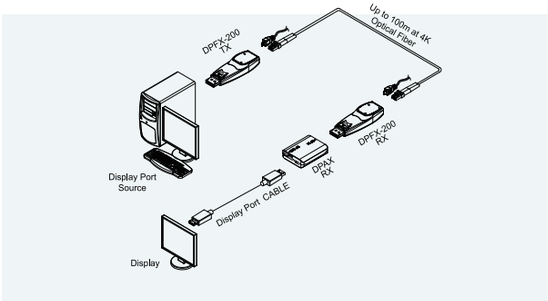


Drawing Dimension [mm]

- Complies with DisplayPort 1.2 standards.
- Supports Ultra High Definition(up to 4096x2160) at 60Hz.
- Offers data recovery function.
- Transmits DisplayPort 1.2 signal up to 18m (59ft) over copper cables.
  3m (10ft) from the Source - 15m (49ft) to the Display at DP1.2
  5m (16ft) from the Source - 20m (65ft) to the Display at DP1.1
- Offers total data rate 21.6Gbps (5.4Gbps per lane).
- Supports auxiliary channel, MST Function.
- Compact design allows direct connect to the Source and Display.
- Operated by USB power or DC power supplying adaptor.
- Size (WDH): 39.5 x 50 x 13mm.
- Plug & Play.
- Designed to be fully compatible with the optical DP1.2 extenders: DPFX-200, DPFX-300, DPFC-200D.

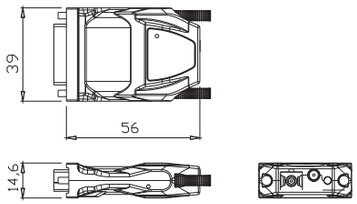






Stretch DVI™ : Small Module

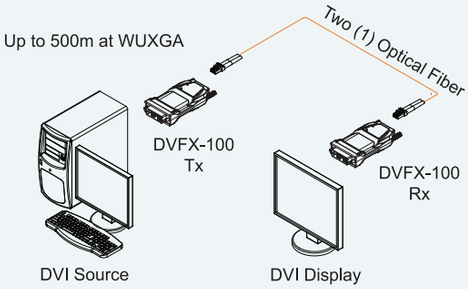
DVFX-100-TR ; One (1) fiber Optical DVI Extension Module



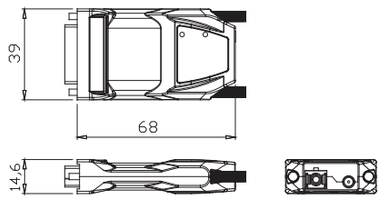
Drawing Dimension [mm]

- WUXGA (1920x1200) at 60Hz DVI data up to 500m (1,640 feet).
- Transmits TMDS over one (1) SC multi-mode fiber.
- Offers Self-EDID Programming feature, detecting from display and restoring EDID to an EEPROM in the transmitter without any physical DDC connection.
- Compact enough to directly plug to graphic sources and displays.
- Includes two (2) +5V DC power adapters for the Transmitter (Tx) and Receiver (Rx).

LC Connector Available: DVFX-100L-TR



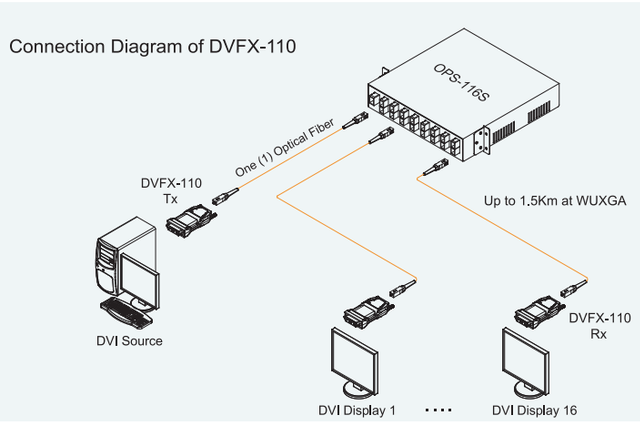
DVFX-110-TR ; One (1) fiber SM/MM Optical DVI Extension Module



Drawing Dimension [mm]

- Extends WUXGA (1920x1200) at 60Hz DVI data.
- Operates with both single and multi-mode optical fibers.
  (1) up to 1.5Km (4,920 feet) over one (1) SC single-mode fiber.
  (2) up to 500m (1,640 feet) over one (1) SC multi-mode fiber.
- Offers Self-EDID Programming feature, detecting from display and restoring EDID to an EEPROM in the transmitter without any physical DDC connection.
- Compact enough to directly plug to graphic sources and displays.
- Includes two (2) +5V DC power adapters for the Transmitter (Tx) and Receiver (Rx).
- Splits one (1) optical signal from the transmitter into sixteen (16) optical signals with *optical splitter, OPS-116S.

*Refer to page 26 for details.

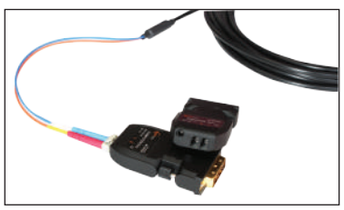


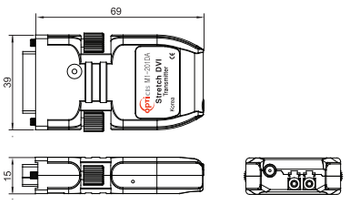
Stretch DVI™ : Small Module

M1-201DA-TR ; SM/MM Fiber-optic DVI Extension Module

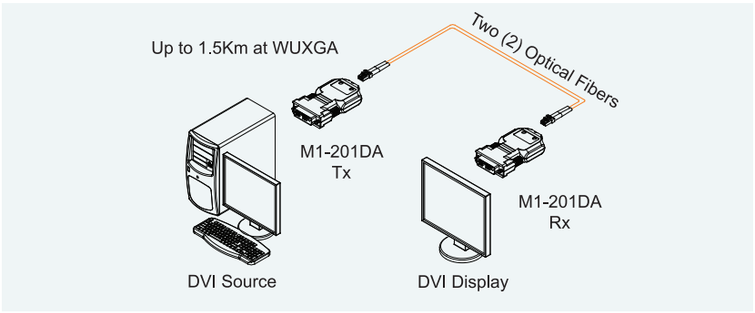
- Supports 2K resolution.
- Operates with both single and multi-mode optical fibers at WUXGA (1920X1200).
  (1) up to 1.5Km (4,920 feet) over two (2) LC single-mode fibers.
  (2) up to 500m (1,640 feet) over two (2) LC multi-mode fibers.
- Offers Self-EDID Programming feature, detecting from display and restoring EDID to an EEPROM in the transmitter without any physical DDC connection.
- Compact enough to directly plug to graphic sources and displays.
- Splits two (2) optical signal from the transmitter into eight (8) optical signals with *optical splitter, OPS-208L

*Refer to page 26 for details.



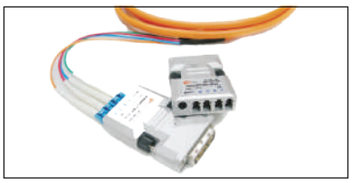


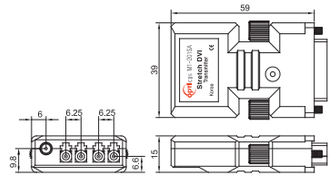
Drawing Dimension [mm]



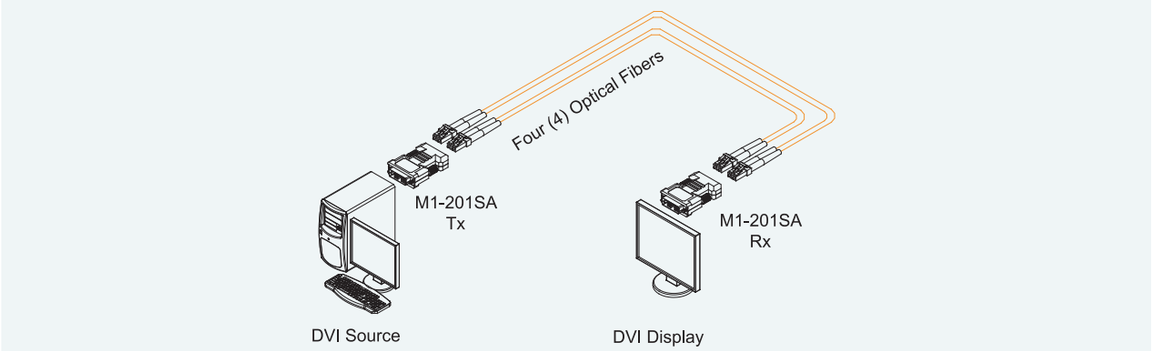
M1-201SA-TR ; Fiber-optic DVI Extension Module

- Extends WUXGA (1920x1200) at 60Hz DVI data up to 500m (1,640 feet).
- Transmits TMDS over a pair of duplex LC multi-mode fibers.
- Offers Self-EDID Programming feature, detecting from display and restoring EDID to an EEPROM in the transmitter without any physical DDC connection.
- Compact enough to directly plug to graphic sources and display.
- Includes two (2) +5V DC power adapters for the Transmitter (Tx) and Receiver (Rx).



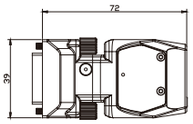


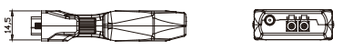
Drawing Dimension [mm]



Stretch DVI™ : Small Module / Stand-alone box

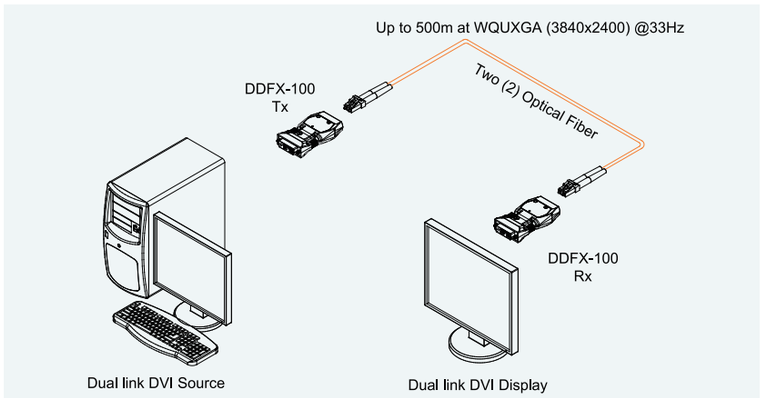
DDFX-100-TR ; Fiber-optic Dual-link DVI Extension Module



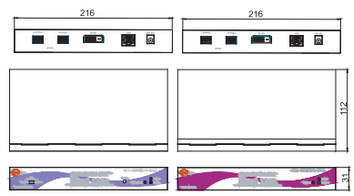


Drawing Dimension [mm]

- WQUXGA (3840x2400) at 33Hz or WQXGA (2560x1600)at 60Hz DVI signal up to 500m (1,640 feet).
- Transmits TMDS over two (2) LC multi-mode fibers.
- Offers Self-EDID Programming feature, detecting from display and restoring EDID to an EEPROM in the transmitter without any physical DDC connection.
- Compact enough to directly plug to graphic sources and displays.
- Includes two (2) +5V DC power adapters for the Transmitter (Tx) and Receiver (Rx).

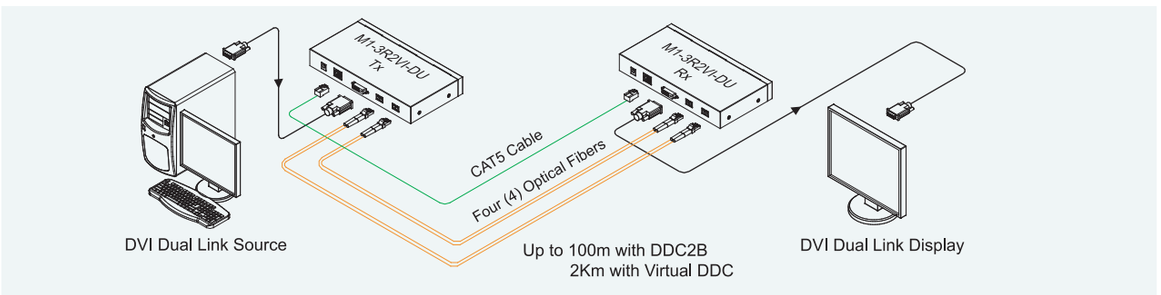


M1-3R2VI-DU-TR ; SM/MM Fiber-optic Dual-link DVI Extender



Drawing Dimension [mm]

- Extends up to 100m (328 feet) with DDC.
  2km (6,560 feet) with virtual DDC.
- Operates with both single and multi-mode optical fibers.
  (1) up to 2km (6,560 feet) over four (4) LC single-mode fibers.
  (2) up to 500m (1,640 feet) over four (4) LC multi-mode fibers.
- Supports up to WQXGA (2560x1600) at 60Hz refresh rate.
- Performs DDC/HDCP interconnection over CAT5 with RJ45 connector.
- Offers Self-EDID Programming feature, detecting from display and restoring EDID to an EEPROM in the transmitter.
- Includes one (1) +24V DC power adapter, plugged to either Transmitter (Tx) or Receiver (Rx). module to supply to the other over CAT5.

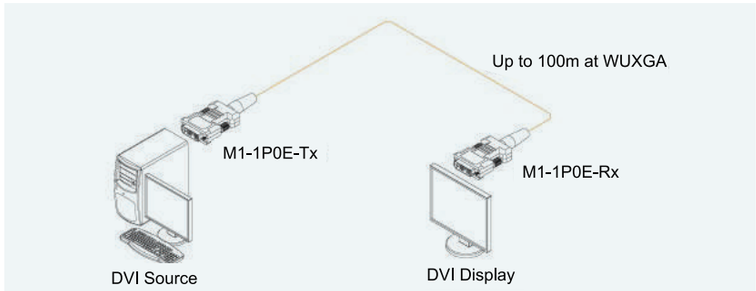


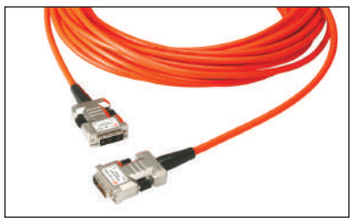
Stretch DVI™ : Active Optical Cable

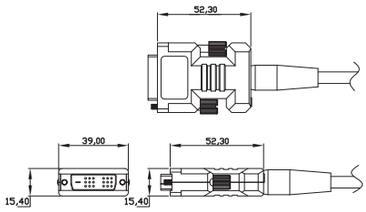
M1-1P0E: DVI Optical Extension Cable

- Hybrid cable with four (4) multi-mode fibers for TMDS transmission and copper wires for DDC/HDCP.
- Extends 2K resolution at 60Hz and HD 1080p up to 100m (328 feet).
- Adopts plenum graded (or LSZH - Low Smoke Zero Halogen) hybrid cable.
- Uses +5V DC power from video sources or +5V DC power adapter.
- Offers Auto-power switching feature to protect circuit from power conflict.
- Compact design of end connector allows direct connection to the host video card and display.

Ordering information : M1-1P0E-xx
where xx = Length in meters
Standards lengths are 10, 15, 20, 30, 40, 50, 70 and 100





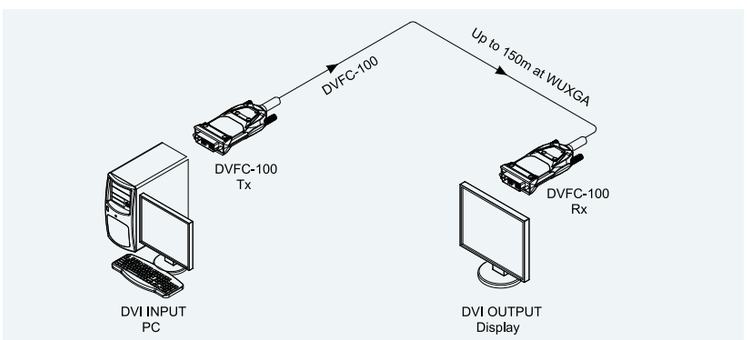


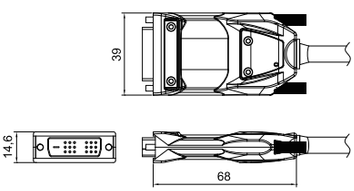
Drawing Dimension [mm]

DVFC-100 ; Active Optical Cable for DVI

- Extends WUXGA (1920x1200) at 60Hz or 1080p at 60Hz (36bit, 3.4 Gbps/ch).
- Transmits DVI signal up to 150m (328feet) over Hybrid cable.
- Operated by DVI source without external power.
- Compact design of end connector allows direct connection. to the host video card and display.
- Complies with EDID, HDCP.

Ordering information : DVFC-100-xx
where xx = Length in meters
Standard lengths are 10, 15, 20, 30, 40, 50, 70, 100, and 150m





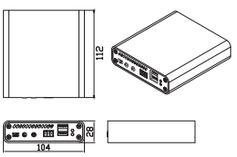
Drawing Dimension [mm]

IP Solution™ : IP Video Wall Controller

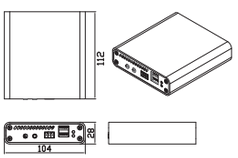
IPVDS-700-ED ; 4K HDMI IP Video Wall Controller with PoE feature

- TCP/IP base IP network: Gigabit Ethernet.
- Support up to 4K (3840x2160@30Hz 4:4:4 or 3840x2160@60Hz 4:2:0) input resolution.
  Support up to 4K (3840x2160@30Hz 4:4:4) output resolution.
- Supports Analog/HDMI audio input and output.
- Fast switching time / low video latency.
- Transmits HDMI/DVI video, audio, USB, RS-232, IR signal over IP network.
- Provides HDMI loop-thru port for local display (Up to 4K 60Hz 4:2:0).
- Provides merge, overlay and split function on multiple video wall layout of PC program.
- Supports up to 256 displays (16x16 - 4x64 - 1x256) video wall and multi-sources.
- Supports M:N virtual matrix.
- Supports 802.3af standard PoE (Power-over-Ethernet).
- PC application for controlling video wall and individual displays.
  * Provides drag and drop operation for host allocation.
  * Provides allocate, merge, split, overlay function on the layout management.
  * Provides preview screen before applying it to actual displays.
  * Provides up to 99 pre-sets for the user defined layout (save/load).
  * Pre-set scheduling function: Sequential mode (dwell time based).
    Weekly mode (hourly/weekly based).
  * Bezel compensation in 0.1mm.
  IPVDS Wall Controller Pro: Multiple video wall (up to 9 different video wall control).
  Crops video source and transmits selected video source to the video wall.

IPVDS-700-E



IPVDS-700-D



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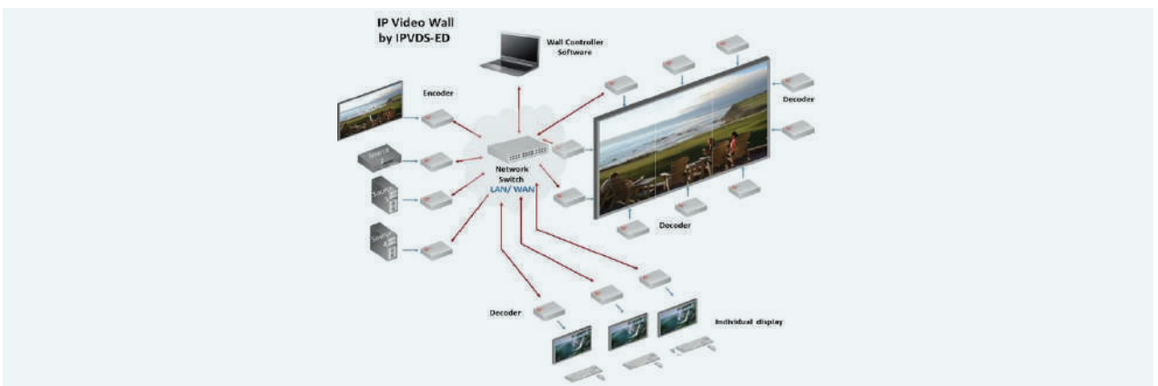
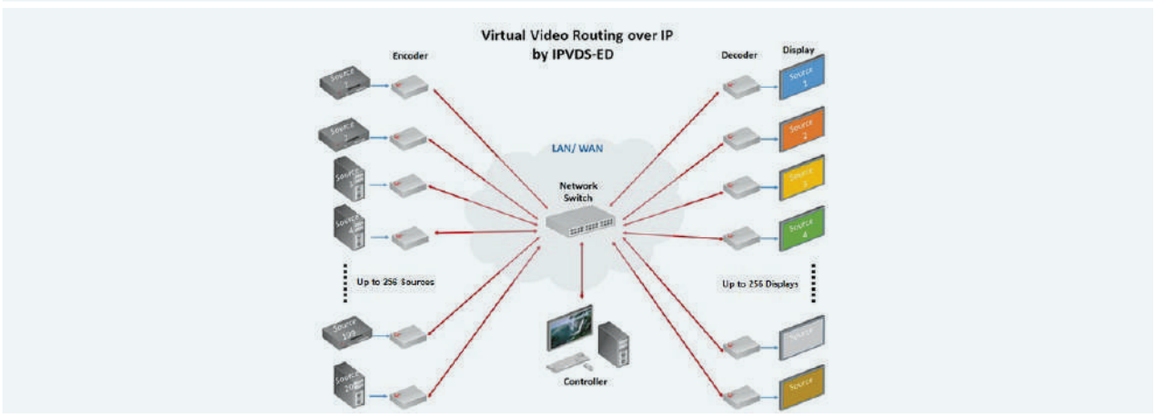




IP Solution™ : IP Media Player

MPDS-100 ; IP Media Player Distribution System

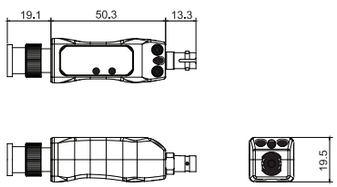
- TCP/IP based IP network: 10/100 Base-T Ethernet with Cat5e/CAT6 Cable and Wifi 802.11m (150Mbps).
- Provides output resolution up to 1080p 60Hz.
- Supports H.264, MPEG4, VP6, VP7 and VP8 video codecs.
- Plays various source including video, documents, IP Camera, picture and audio files.
    - ▪ Document File : pdf, doc(x), xls(x), ppt(x), hwp.
    - ▪ Video File : avi, mov, mkv, mp4, etc.
    - ▪ Audio File : mp3, ogg, wav, etc.
    - ▪ Streaming: YouTube, HTTP, RTP/RTSP, etc.
    - ▪ Image File : bmp, jpg, gif, png, etc.
    - ▪ Text : Static/Scrolling Text.
- Supports full HD IP Camera (H.264 & ONVIF).
- Provides local GUI which can be utilized as PC (web browsing, file exploring, video playing features).
- Supports group scheduling, publishing features.
- Support up to 100 groups and 99 presets (configurable total of 9,900 isolated screen).
- Provides various layout template which user can configure desired screen.
- Splits up to 4 different screens with 1280x720p.
- Supports Picture in Picture feature in various position with 1920x1080p.

Stretch SDI™ : Small Module

SDIX-100-TR ; Miniature Fiber-optic 3G-SDI Module

- Supports multi-rate SDI up to 3G-SDI over one (1) fiber.
- Extends up to 30Km at 3Gbps.
- Applicable to both single and multi-mode fibers.
- Offers Clock and Data recovery (CDR) included model, SDIX-100C as an option.
- SDI BNC input connector and ST terminated fiber optical connector.
- Latch-locking power connector (mini-XL).
- Robust metal die-casting enclosure for harsh environment.
- Supports +5~+16V DC of power range.
- Offers 4-pin XLR male to mini-XL female connector cable, PG-100 as an option for direct +12V power supply from camera.
- Adopts up to twelve (12) units using *BR-300 and BR-310.

*BR-300 (310): Refer to page 25 for the detailed information .



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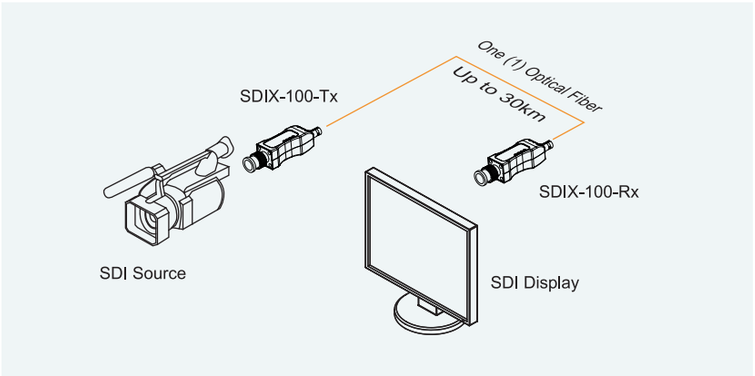


SDISE-100-TR ; Miniature Fiber-optic 3G-SDI Module for HDCCTV

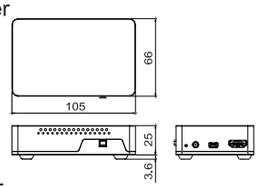
- Supports multi-rate SDI up to 3G-SDI.
- Extends up to 2km at 3Gbps over one (1) ST single-mode fiber.
- SDI BNC input connector and ST terminated fiber optical connector.
- Includes two (2) +5V DC power jacks for transmitter and receiver.
- Robust metal die-casting enclosure for harsh environment.
- Adopts up to twelve (12) units using *BR-300 and BR-310.

Wireless™ : Stand-alone

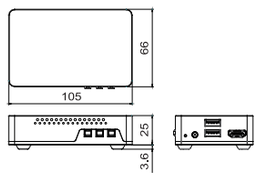
HDWX-100-TR ; Wireless Extender for HDMI, Keyboard & Mouse

- Compact design for direct hook up.
- Wi-Fi standard : 802.11n, 5GHz, 2x2 MIMO, internal antennas (Maximum Throughput: 300Mbps).
- WPA/WPA2 and QoS.
- Supports up to 1080p, 60Hz video and 7.1ch audio.
- Has H.264 codec.
- HDMI V1.3 and HDCP2.0 compatible.
- Coverage distance (1:1 based): up to 30m.
- Multi-cast : up to 1:4 distribution at 1080p at 60Hz.
- USB backchannel : extend PC control to remote-site (RX) : HID mouse and keyboard.
- Includes Two (2) +5V DC power adapters for the Transmitter (Tx) and Receiver (Rx).

Transmitter



Receiver



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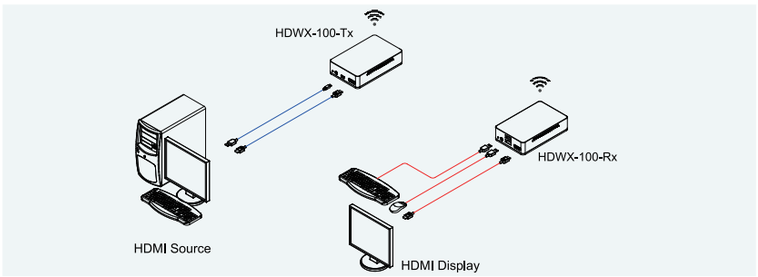
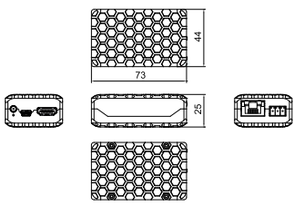


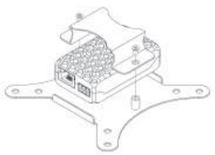
Stretch HDBaseT™ : Small Module

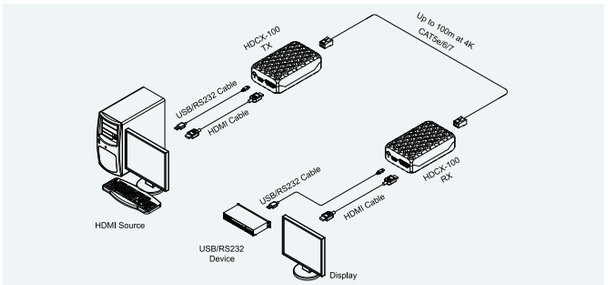
HDCX-100 ; 4K HDMI2.0+USB2.0+ RS232 Extender

- Supports 4K 60Hz and HDMI2.0 standards.
  - WQUXGA (3840x2160) at 60Hz (4:2:0).
  - WQUXGA (3840x2160) at 30Hz (4:4:4).
  - 12-bit Deep Color.
  - Maximum pixel clock : 300Mhz.
- Transmits HDMI2.0 data up to 100m (330feet). over one (1) CAT5e or CAT6 cable.
- HDCP1.4 / 2.2 Standard.
- CEC & 3DTV pass-through.
- USB2.0 for HID, Touch panel, Mass Storage and VCP.
- RS-232 control extension.
- Compact design and bracket allows easy installation even small space.
- Plug & Play.



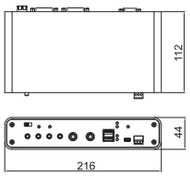
Drawing Dimension [mm]





Stretch Multi-media™ : KVM Extender

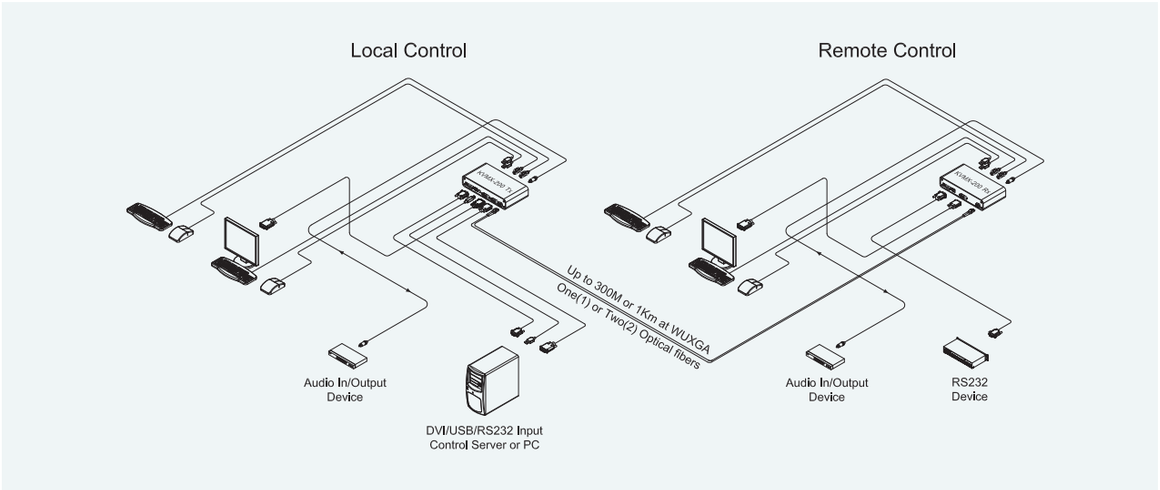
KVMX-200-TR ; One (1) or Two (2) fiber SFP connection Selectable DVI Optical KVM Extender



Drawing Dimension [mm]

-Provides one (1) or two (2) fibers connection by SFP module.
-Supports DVI signal up to WUXGA (1920x1200) at 60Hz.
-Transmits DVI, USB HID, PS/2, RS-232 and audio signal up to 1km (3,280 feet) over one (1) LC optical fiber.
-Operates with both single and multi-mode optical fibers.
(1) up to 1km (3,280 feet) over one (1) or two (2) LC single-mode fibers.
(2) up to 300m (985 feet) over two (2) LC multi-mode fibers.
-Offers DVI, USB, and PS/2 Loop through ports for a Local display and Keyboard / Mouse.
-Supports bi-directional stereo audio.
-Auto-mix EDID feature.
-Lossless image quality without frame dropping.
-Supports DIO port.
-RS-232 serial data communication through 9 pin D-sub female connector.
-Offers remote console switch & indicator, 19" 1RU mounting rack, and mounting bracket optionally.
-Includes two (2) +12V DC power adapters for the Transmitter (Tx) and Receiver (Rx).

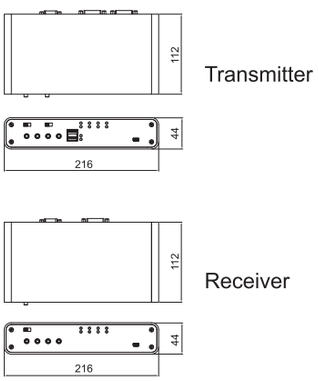
Ordering information :
- KVMX-200-TR: One (1) single-mode fiber connection
- KMVX-201-TR: Two (2) single-mode fibers connection
- KVMX-202-TR: Two (2) multi-mode fibers connection



Stretch Multi-media™ : KVM Extender

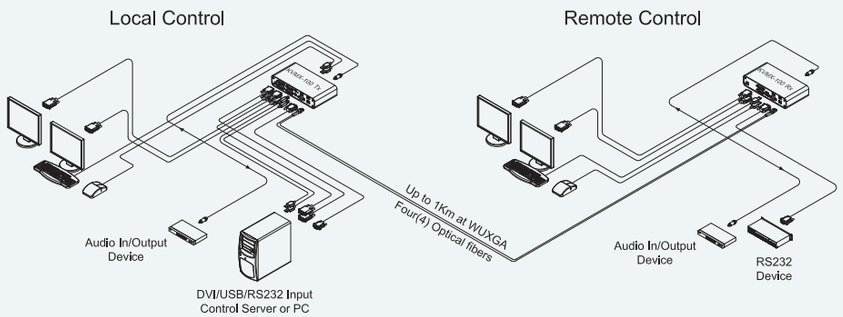
KVMX-100-TR ; Two (2) PCs Switchable Dual-head DVI Optical KVM Extender

- Provides 2:1 switch by selecting one (1) PC between two (2) PCs as a host.
- Supports two (2) single-link DVI displays up to WUXGA (1920x1200) at 60Hz.
- Transmits DVI, USB HID, RS-232 and audio signal up to 1km (3,280 feet) over two (2) duplex LC optical fibers.
- Operates with both single and multi-mode optical fibers.
  (1) up to 1km (3,280 feet) over two (2) LC duplex single-mode fibers.
  (2) up to 300m (985 feet) over two (2) LC duplex multi-mode fibers.
- Offers DVI, USB Loop through ports for Local two (2) displays and Keyboard / Mouse.
- Supports bi-directional stereo audio.
- Auto-mix EDID feature.
- Lossless image quality without frame dropping.
- USB HID ports for keyboard and mouse.
- RS-232 serial data communication through 9 pin D-sub female connector.
- Offers remote console switch, 19" 1RU mounting rack, and mounting bracket optionally.
- Includes two (2) +12V DC power adapters for the Transmitter (Tx) and Receiver (Rx).

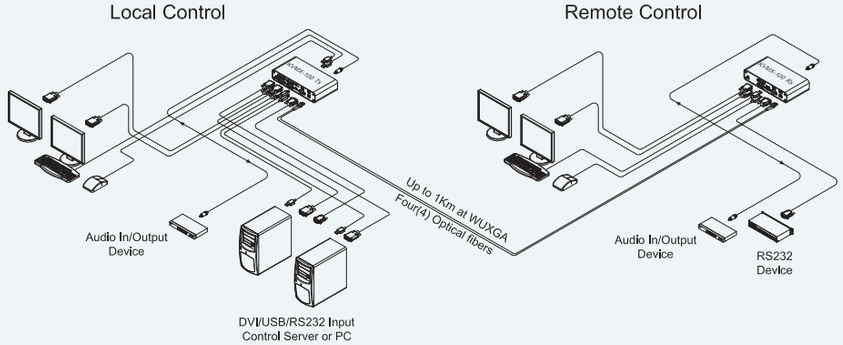


Drawing Dimension [mm]

One (1) PC, equipped Dual-head DVI ports

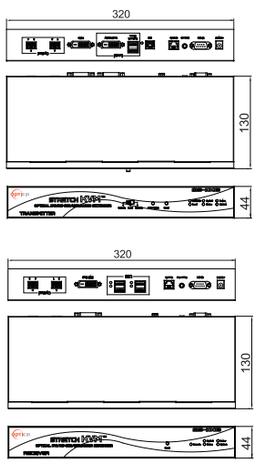


Two (2) PCs, equipped each DVI port



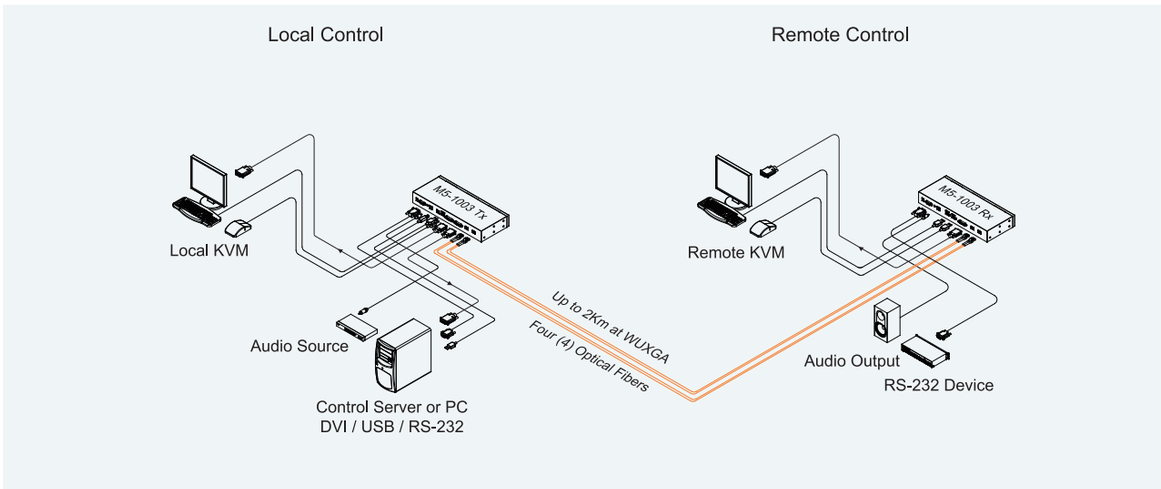
Stretch Multi-media™ : KVM Extender

M5-1003-TR; SM/MM Fiber-optic KVM Extender



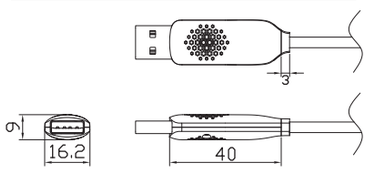
Drawing Dimension [mm]

- Extends DVI, USB, Audio and RS-232 up to 2Km (6,560 feet) over four (4) LC optical fibers.
- Supports DVI up to WUXGA (1920x1200) 24-bit color depth at 60Hz.
- Offers DVI and USB ports for local display and keyboard/mouse.
- Operates with both single and multi-mode optical fibers.
  (1) up to 2Km (6,560 feet) over two (2) LC duplex single-mode fibers.
  (2) up to 500Km (1,630 feet) over two (2) LC duplex multi-mode fibers.
- No copper wires in links.
- Lossless image quality without frame dropping.
- Provides Self-EDID Programing feature.
- Complies with USB2.0.
- Offer 4ch USB2.0 hub in the receiver.
- RS-232 serial data communication through 9 pin D-sub female connector.
- Supports one-directional analog stereo audio.
- Offers remote console switch and indicators optionally.
- Converts control authority by front panel switch or remote console switch.
- Includes two (2) +12V DC power adapters for the Transmitter (Tx) and Receiver (Rx).
- Rack mountable : 1U half rack with metal enclosures.



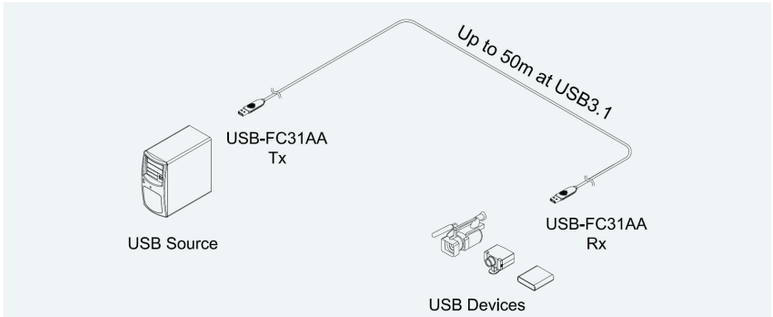
Stretch USB™ : Active Optical Cable

USB-FC-31AA ; USB 3.1 Active Optical Cable

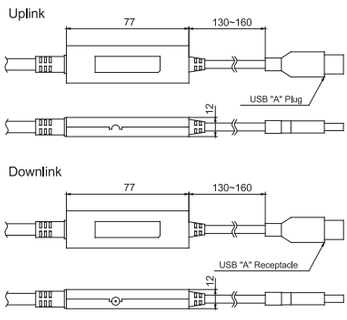


Drawing Dimension [mm]

- Compatible with USB 3.1 and USB 3.0.
- Transmists USB 3.1(3.0) data to 50m (164 feet) over hybrid cable.
- Tx/Rx insensitive design (two-way port).
- SuperSpeed USB 10Gbps data rate.
- Adopts plenum graded (or LSZH - Low Smoke Zero Halogen) hybrid cable.
- Operated by 5V source power.
- USB 3.1(3.0) A type plug-in to A type receptacle.
- No software installation required: Plug and play.



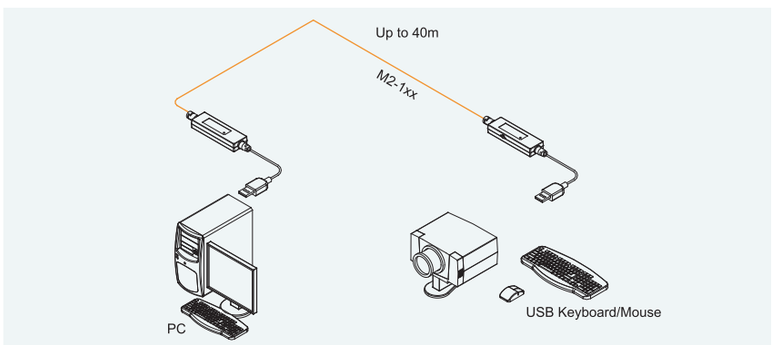
M2-100 ; USB Pure Optical Extension Cable



Drawing Dimension [mm]

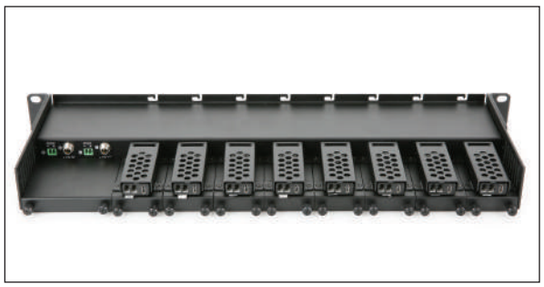
- Complies with USB1.1 High-speed (12Mbps) standard.
- Extends up to 40m (130 feet).
- Offers perfect electrical galvanic isolation.
- Adopts four (4) strands of multi-mode fibers between two links, not to be interfered magneto electrically.
- No software to install: Plug and Play.
- Uses USB controller power for the uplink and +5V DC power adapter in shipping group for the downlink.
- Supports wide-ranged OS Win7, Win98, XP, 2000, Mac and SUN Solaris (Certified).
- LC fiber detachable type is available as an option.

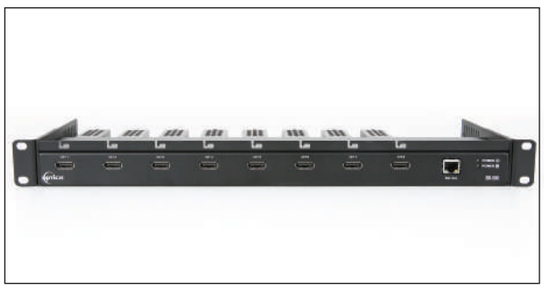
Ordering information : M2-1AB-xx for pure fiber
where A = 0 : A plug-in to A receptacle
= 1 : A plug-in to B plug-in
(use an A-to-B short cable).
B = 0 : for Windows/Mac.
= S : for SUN Solaris.
xx = Length in meter.



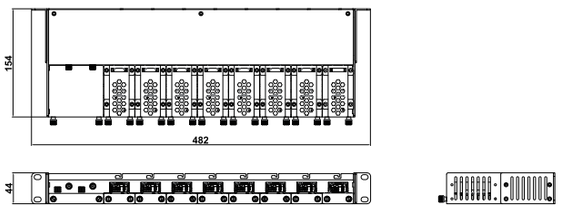
Stretch DisplayPort™: Multi-module Mounting Rack

BR-500 ; 19" 1RU Power Supply Frame for DisplayPort 1.2





- Compact 19" 1RU Power Supply Frame.
- Adopts up to 8 units of DisplayPort modules (TX only)
  *DPFX-200-TX, DPFX-300-TX.
- Available for primary and dual power models.
- Supports Load-sharing.
- Input power: 12.0V/4.2A (locking type), 13.5V/6.5A (Phoenix Connector)
- Power Supply: 100-240VAC, 50-60HZ

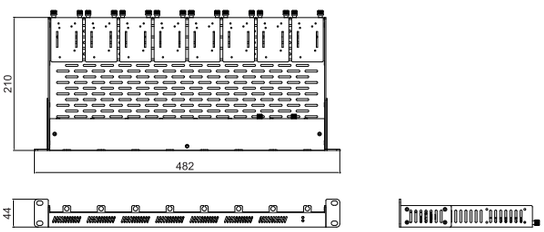


Drawing Dimension [mm]

Stretch DVI™ / HDMI™: Multi-module Mounting Rack

BR-400 ; 19" 1RU Power Supply Frame for Optical modules

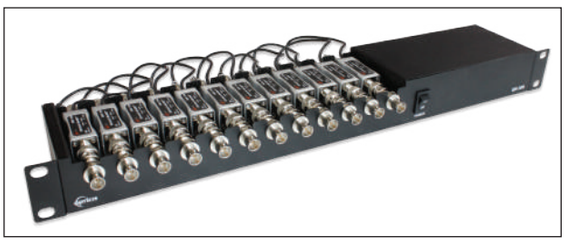
- Compact 19" 1RU Power Supply Frame.
- Adopts up to 8 units of Optics Optical modules.
- Available for primary and dual power models.
- Supports Load-sharing.
- Input power: 100-240VAC, 50-60Hz.
- Applicable Opticis Items: DPFX-100, HDFX-200, DVFX-110, DVFX-100, DDFX-100, M1-201DA, M1-201SA.



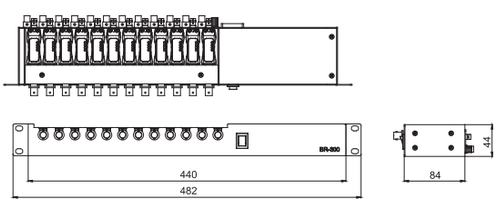
Drawing Dimension [mm]

Stretch SDI™ : Multi-module Mounting Rack

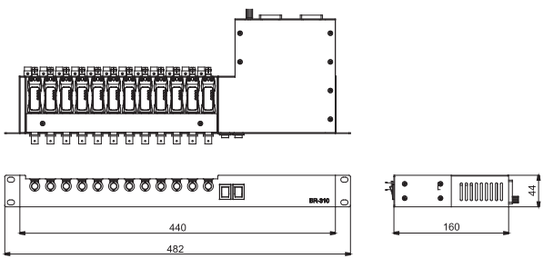
BR-300 / BR-310 ; 19" 1RU Multi-SDI Extender Mounting Frame



- Compact 19" 1RU power supply and multi-SDI extender mounting frame.
- Adopts up to twelve (12) units of 3G-SDI Extenders.
- Provides load-sharing and redundant back-up feature. (BR-310)
- Supports 100-240V AC, 50-60Hz of input power.
- Uses ST fiber connectors on the front and SDI BNC connectors on the rear.
- Adopts status indicators for power.



BR-300

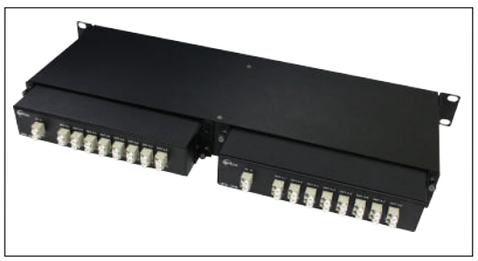


BR-310

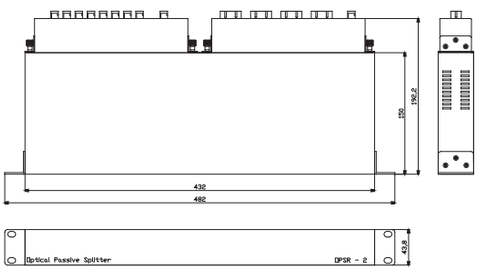
Drawing Dimension [mm]

DVI Optical Splitter

OPSR-2 ; 19" 1RU frame for optical splitter, OPS-xyz

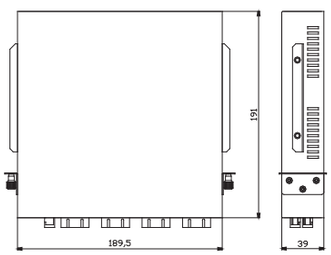


- Adopts two (2) units of optical splitters, OPS-xyz and one (1) unit can be used as stand-alone.
- Needs not electrical power.



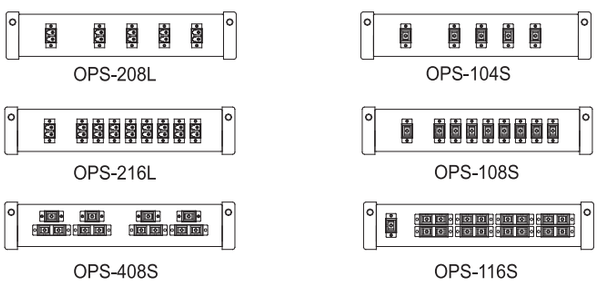
Drawing Dimension [mm]

OPS-xyz ; Rack mountable Optical Splitter



- Distributes optical signal over single-mode fiber up to sixteen(16) channels without any active device or electrical power.
- Each unit can be used as stand-alone.
- Works with Opticis DVFX-110, M1-201DA-TR, SDIX-100(C) and SDISE-100.

Ordering information: OPS-xyz
Where x (1 digit) = The number of input fiber (1, 2)
y (2 digit) = The number of output fiber (4, 8, 16)
z = Connector type (S: SC connector, L: LC connector)

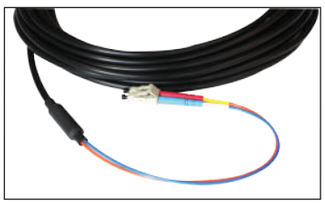


OPS-104S : 1x4 SC optical splitter
OPS-108S : 1x8 SC optical splitter
OPS-116S : 1x16 SC optical splitter
OPS-408S : 4x8 (4EA of 1x2) SC optical splitter
OPS-208L : 2x8 (2EA of 1x4) LC optical splitter
OPS-216L : 2x16 (2EA of 1x8) LC optical splitter

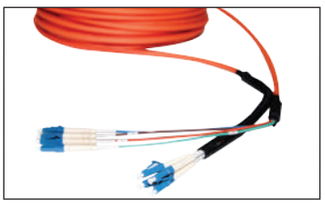
Drawing Dimension [mm]

Fiber-optic Cable for Opticis extension connectivity

Patch Cord



Distribution Cable



Breakout Cable

- Offers various type of Fiber-optic cables.
- Single and Multi-mode cable ·LC / SC / ST termination.
- Simplex (1-core), Duplex (2-core), Triplex (3-core), Quadplex (4-core) and Octuplex (8-core).
- Connectors are numbered and color coded.
- PVC/LSZH (Low Smoke Zero Halogen) available.
- Available grade: OM1 / OM2 / OM3 / OM4.
- Applicable for all Opticis products.
- UL certified.

Ordering information : AABC-xyzEF-Length
where, "A" : stands front-end termination as LL for LC-LC, SS for SC-SC, TT for ST-ST, LS for LC-SC, LT for LC-ST, SL for SC-LC, ST for SC-ST, TL for ST-LC, TS for ST-SC.
"B" : stands M for Multi-mode, S for Single-mode.
"C" : stands numbers of core as S for Simplex (1-core), D for Duplex (2-core), T for Triplex (3-core),Q for Quadplex (4-core), and O for Octuplex (8-core).
"xyz" : stands 625 for multi-mode core size, 62.5 micrometers(μm). 090 for single-mode core size, 9 micrometers(μm).
"EF" : stands blank for Patch cord, BO for Breakout and DT for Distribution.
Standard lengths are = 10, 20, 30, 40, 50, 60, 70, 80, 90 and 100m.
Other lengths up to 30km can be customized .

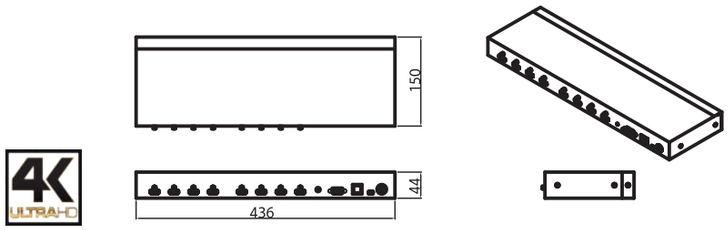
Matrix™

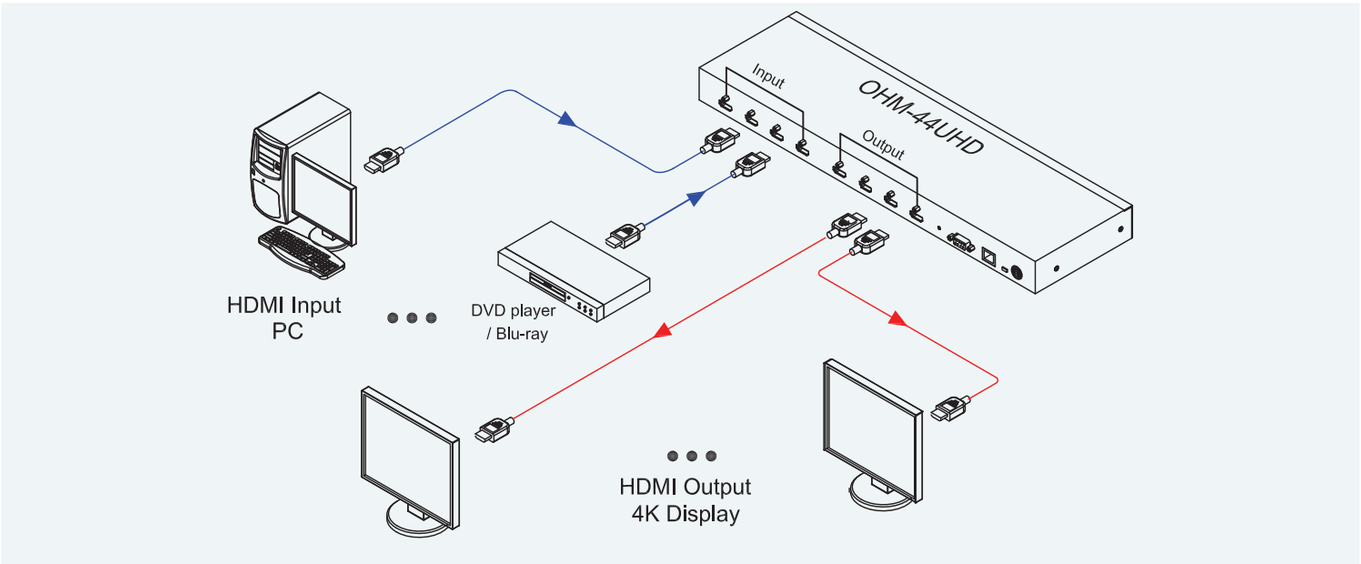
Opticis aims to provide high-speed technology of digital audio & video matrix routing mainly along with serial data interface and interconnection required in audio & video industry to assure the increased demand of the diversified use in graphic sources combining single to multiple networking and fulfill the ultimate performance with easy-setting features through the multiplicity of the setting methods

Matrix™ : 4 x 4 HDMI 2.0

OHM-44UHD ; 4 x 4 HDMI 2.0 Matrix

- Supports HDMI 2.0 Standards.
- Supports HDMI 2.0 resolution up to 4096 x 2160 @60Hz (RGB & YCBCr : 4:4:4).
- Provides user-friendly EDID management tools with 4 slots for user-created EDID, and EDID bypass support.
- Supports storing and recalling of up to four routing presets.
- Controllable via front-panel buttons, RS-232, telnet, WebGUI, and IR remote.
- HDCP 1.4 and 2.2 compliant
- Supports pass-through of LPCM 7.1, bit and HD bit audio formats over HDMI.
- Supports HDR at 10 bit or 12 bit speeds respectively within its maximum bandwidth, 18Gbps.
- Supports 3D content transmission.
- Dimension (WDH): 436 x 150 x 44 mm.





Optical Modular Matrix™ : 32x32 Dual link

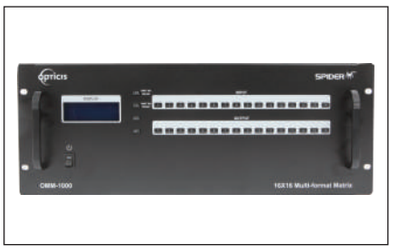
OMM-2500 ; 32 X 32 DVI / Dual-link DVI / HDMI / SDI / DP and Optical Modular Matirx

- Enables to cross switch between one (1) of thirty two (32) DVI, HDMI, SDI, or DP inputs to any of thirty two (32) digital displays.
- Supports up to WUXGA (1920x1200) at 60Hz for Single link DVI, WQXGA (2560x1600) at 60Hz for Dual link DVI and DisplayPort or 1080p at 60Hz for HDMI and SDI.
- Supports configuration of input and output channels up to 32 x 32 by a card with four (4) channels.
- Dual-link DVI supports from 2x2 to 16x16 input and output channels by a card with two (2) channels.
- Provides Touch LCD and a user-friendly graphic interface.
- Supports DDC / HDCP (Except for SDI and optical cards).
- Provides various control methods (RS-232, TCP/IP, WEB, Key input and LCD Touch).
- Provides four (4) options to set EDID for graphic source: Default Mode / Auto Detect Mode / Output Copy Mode / Resolution List Mode
- Provides reference video output and monitoring output for easy installation.
- Supplies multi-viewer card, QDVI-O, viewing any four (4) inputs on a display as an option.
- Has hot swappable dual power supplies with load sharing as an option.
- Provides Preset mode to save and load the current routings.
- 7U, 19" Rack-mountable.
- Dimension (WDH): 440 x 440 x 311mm
- Weight : 15kg

1) SDVI-4EI: 4ch electrical Single-link DVI input card
2) SDVI-4EO: 4ch electrical Single-link DVI output card
3) DDVI-2EI: 2ch electrical Dual-link DVI input card
4) DDVI-2EO: 2ch electrical Dual-link DVI output card
5) SDVI-1FI: 4ch optical DVI input card
6) SDVI-1FO: 4ch optical DVI output card
7) HDMI-4EI: 4ch electrical HDMI input card
8) HDMI-4EO: 4ch electrical HDMI output card
9) SDI-4EI: 4ch electrical SDI input card
10) SDI-4EO: 4ch electrical SDI output card
11) DP1-4EI: 4ch electrical DisplayPort input card
12) DP1-4EO: 4ch electrical DisplayPort output card
13) CDVI-4EO: 4ch electrical Seamless DVI output card
14) QDVI-O: Multi viewer slot card

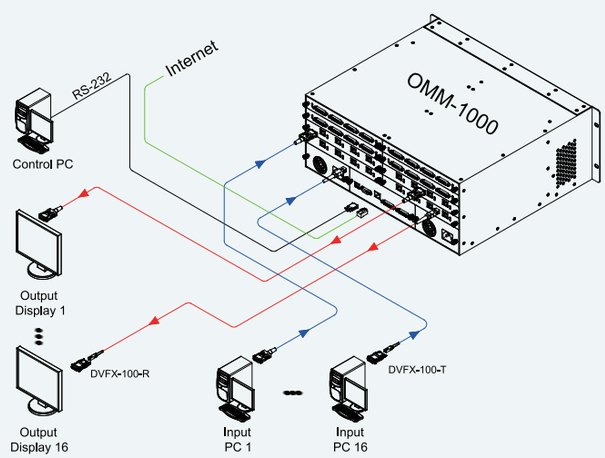
SPIDER™ : Optical Modular Matrix 16x16

OMM-1000 ; 16 x 16 DVI / Dual-link DVI / HDMI / SDI / DP and Optical Modular Matrix



- Enables to cross switch between one (1) of sixteen (16) DVI, HDMI, SDI, or DP inputs to any of sixteen (16) digital displays.
- Supports up to WUXGA (1920x1200) at 60Hz for Single link DVI, WQXGA (2560x1600) at 60Hz for Dual link DVI and DisplayPort or 1080p at 60Hz for HDMI and SDI.
- Supports configuration of input and output channels up to 16 x 16 by a card with four (4) channels.
- Dual-link DVI supports from 2x2 to 8x8 input and output channels by a card with two (2) channels.
- Supports DDC / HDCP (Except for SDI and optical cards).
- Provides various control methods (RS-232, TCP/IP, WEB, Key input).
- Provides three (3) options to set EDID for graphic source.
- Provides reference video output and monitoring output for easy installation.
- Supplies multi-viewer card, QDVI-O, viewing any four (4) inputs on a display as an option.
- Has hot swappable dual power supplies with load sharing as an option.
- Provides Preset mode to save and load the current routings.
- 4U, 19" Rack-mountable.
- Dimension (WDH): 440 x 380 x 178mm
- Weight : 10kg

1) SDVI-4EI: 4ch electrical Single-link DVI input card
2) SDVI-4EO: 4ch electrical Single-link DVI output card
3) DDVI-2EI: 2ch electrical Dual-link DVI input card
4) DDVI-2EO: 2ch electrical Dual-link DVI output card
5) SDVI-1FI: 4ch optical DVI input card
6) SDVI-1FO: 4ch optical DVI output card
7) HDMI-4EI: 4ch electrical HDMI input card
8) HDMI-4EO: 4ch electrical HDMI output card
9) SDI-4EI: 4ch electrical SDI input card
10) SDI-4EO: 4ch electrical SDI output card
11) DP1-4EI: 4ch electrical DisplayPort input card
12) DP1-4EO: 4ch electrical DisplayPort output card
13) CDVI-4EO: 4ch electrical Seamless DVI output card
14) QDVI-O: Multi viewer slot card



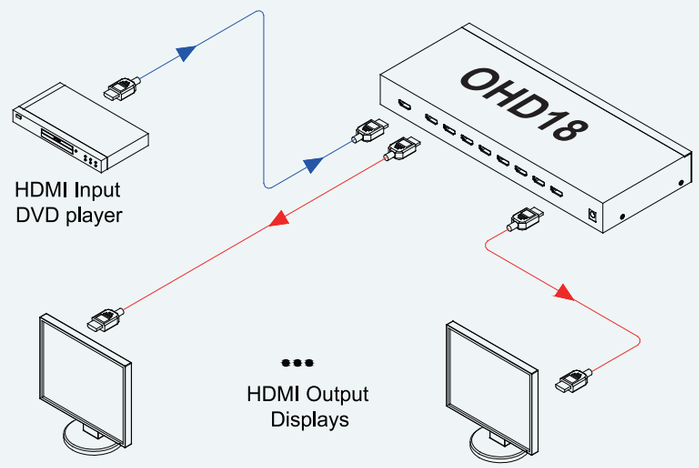
SPIDER™ : 1x4 / 1x8 HDMI Distributor

OHD14 ; 1 x 4 HDMI Distributor

- Divides one (1) HDMI source into four (4) HDMI displays.
- Supports HDMI 1.3 / HDCP 1.1 compliance for all channels.
- Offers many types of option for EDID and CEC function.
- Maintains high resolution video up to HD 1080p or WUXGA (1920x1200) for PC.
- Complies with optical HDMI/DVI cables at both sides of input and output.
- Dimension (WDH): 200 x 104 x 25mm.
- Weight: 0.3kg.

OHD18 ; 1 x 8 HDMI Distributor

- Divides one (1) HDMI source into eight (8) HDMI displays.
- Supports HDMI 1.3 / HDCP 1.1 compliance for all channels.
- Maintains high resolution video up to HD 1080p or WUXGA (1920x1200) for PC.
- Complies with optical HDMI/DVI cables at both sides of input and output.
- Dimension (WDH) : 436 x 120 x 44mm.
- Weight : 0.7kg.



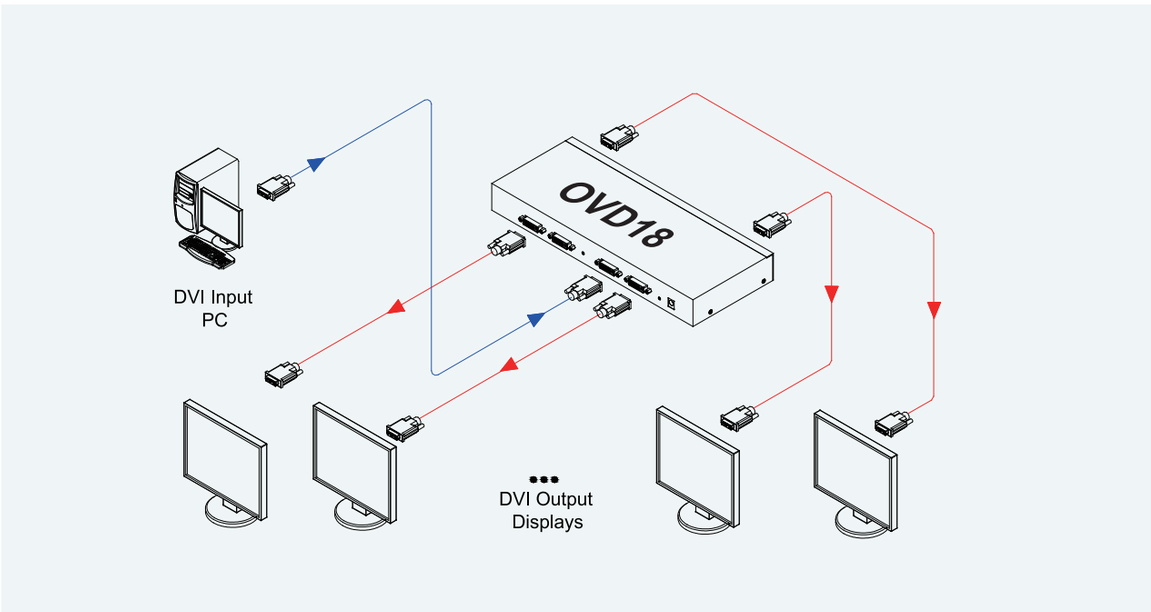
SPIDER™ : 1x4 / 1x8 DVI Distributor

OVD14 ; 1 x 4 DVI Distributor

- Divides one (1) DVI source into four (4) DVI displays.
- Complies with DDWG1 .0 for DVI standards.
- Supports DDC/HDCP.
- Maintains high resolution video up to WUXGA (1920x1200) for PC.
- Complies with optical HDMI/DVI cables at both sides of input and output.
- Dimension (WDH) : 160 x 91 x 25mm
- Weight : 0.3kg

OVD18 ; 1 x 8 DVI Distributor

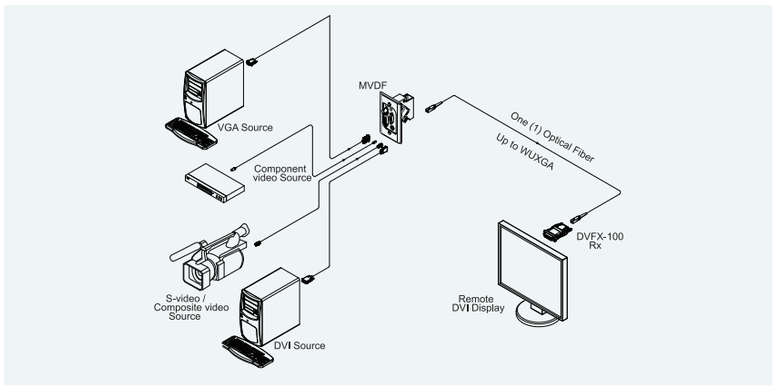
- Divides one (1) DVI source into eight (8) DVI displays.
- Complies with DDWG 1.0 for DVI standards.
- Supports DDC/HDCP.
- Maintains high resolution video up to WUXGA (1920x1200) for PC.
- Complies with optical HDMI/DVI cables at both sides of input and output.
- Dimension (WDH) : 240 x 103 x 25mm
- Weight : 0.4kg

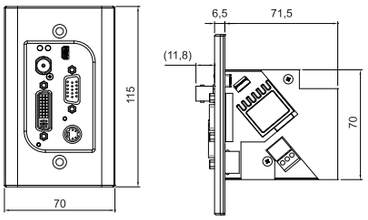


Stretch DVI™ : Multi-format Converter

MVDF ; 1 Gang-sized Multi-format video to Optical DVI Converter

- Support up to WUXGA (1920x1200) at 60Hz for DVI and VGA input.
- Offers scaled up output of SXGA (1280x1024) at 60Hz for S-Video and Composite video input.
- Transmits optical signal up to 500m (1,640feet) over SC terminated 1 core multi-mode fiber (50um).
- Provides Self-EDID for DVI and VGA.
- Operated by DC 8~15V.
- Supports auto signal detection.
- Equips two (2) LEDs for power and video input status.

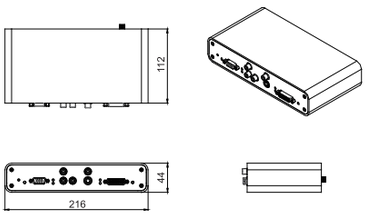




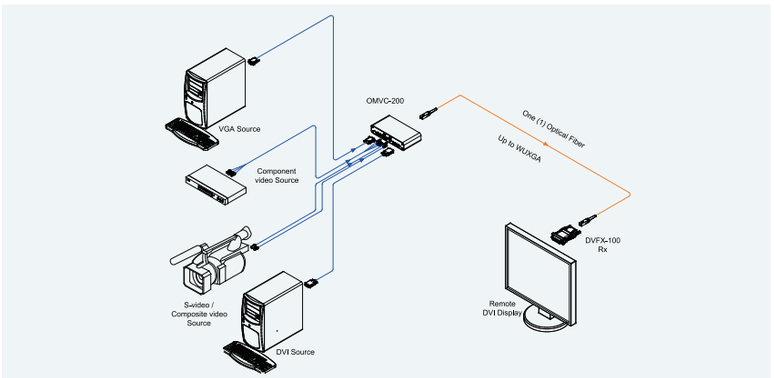
Drawing Dimension [mm]

OMVC-200 ; Multi-Format Converter

- Extends signal up to 500m (1,640 feet) over SC multi-mode fiber.
- Accepts DVI, VGA, Component, S-Video, and Composite inputs.
- Detects the first connected input video signal and converts it into one (1) fiber DVI.
- Supports various resloutions with up-scaling feature.
- Reads and restores the targeted EDID in the OMVC-200 (Self-EDID).
- Has Locking type DC power supplier.
- Provides mounting bracket (model name: OPMCB) complying with VESA 75, 100 standards to be attached on various places.
- Dimension (WDH) : 216 x 112 x 44mm.



Drawing Dimension [mm]

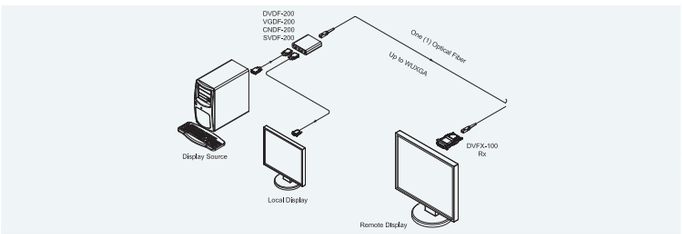


Stretch DVI™ : Single-format Converter

DVDF-200 ; DVI to one (1) fiber DVI converter

- Extends signal up to 500m (1,640 feet) over SC multi-mode fiber.
- Accepts DVI, and converts it into one (1) fiber DVI.
- Has Loop-through DVI for on-site monitoring.
- Reads and restores the targeted EDID in the DVDF-200 (Self-EDID).
- Has Locking type DC power supplier.
- Be mountable in 19" 1RU rack (up to 4 units with OPSCR-1U).
- Provides mounting bracket (model name: OPSCB) complying with VESA 75, 100 standards to be attached on various places.
- Dimention (WDH) : 104 x 112 x 28mm.

19" 1RU Mounting Rack



VGDF-200 ; VGA to one (1) fiber DVI converter

- Extends signal up to 500m (1,640 feet) over SC multi-mode fiber.
- Accepts VGA and converts it into one (1) fiber DVI.
- Has Loop-through VGA for on-site monitoring.
- Reads and restores the targeted EDID in the VGDF-200 (Self-EDID).
- Has Locking type DC power supplier.
- Be mountable in 19" 1RU rack (up to 4 units with OPSCR-1U).
- Provides mounting bracket (model name: OPSCB) complying with VESA 75, 100 standards to be attached on various places.
- Dimention (WDH) : 104 x 112 x 28mm.

CNDF-200 ; Component video to one (1) fiber DVI converter

- Extends signal up to 500m (1,640 feet) over SC multi-mode fiber.
- Accepts Component video and converts it into one (1) fiber DVI.
- Has Loop-through output for on-site monitoring.
- Has Locking type DC power supplier.
- Be mountable in 19" 1RU rack (up to 4 units with OPSCR-1U).
- Provides mounting bracket (model name: OPSCB) complying with VESA 75, 100 standards to be attached on various places.
- Dimention (WDH) : 104 x 112 x 28mm.

SVDF-200 ; S-video / Composite video to one (1) fiber DVI converter

- Extends signal up to 500m (1,640 feet) over SC multi-mode fiber.
- Accepts S-video / Composite video and converts it into one (1) fiber DVI.
- Has Loop-through output for on-site monitoring.
- Has Locking type DC power supplier.
- Be mountable in 19" 1RU rack(up to 4 units with OPSCR-1U).
- Provides mounting bracket (model name: OPSCB) complying with VESA 75, 100 standards to be attached on various places.
- Dimention (WDH) : 104 x 112 x 28mm.

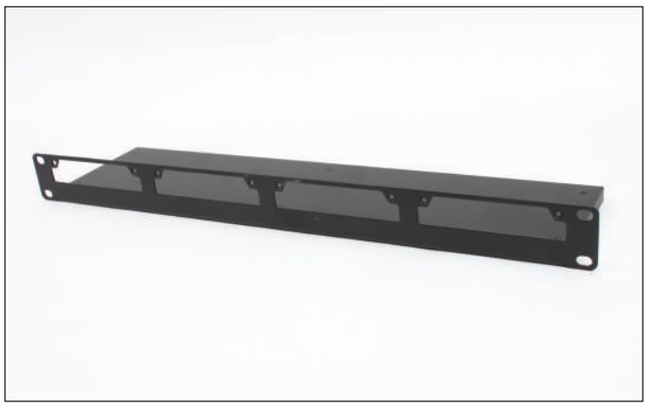
Accessories

PR5V-16 ; USB/DC Power Rack up to 16 ports

- 19" 1RU USB Power Supply Frame.
- Provides up to 16 different USB or DC power to Opticis products that require under 5V power consumption.
- Applicable to most of Opticis products; small module extenders, IP products and video format converters that can be empowered by USB or DC power supply.
- Supports Load-sharing.

19" 1RU Mounting Rack

OPSCR-1U



OPSCR-1U-B

- Be mounted in a 19" 1RU rack for space saving up to four(4) units for single format converters and IP products.
- Provides easy and simple installation.
- Dimension(WDH) : 482 x 116.3 x 44mm.

MEMO

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Opticis is the world-best solution provider for
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