DVI-LCTX-500M-1
DVI-LCRX-500M-1
1920x1200, 500 m

OptixCom
Connect with Light
Optical DVI Extender Modules

Description

Built upon OptixCom's optical transceiver technology, the DVI extender module is optimized for sending and receiving high definition video signals. Proprietary digital design is utilized to ensure video transmission over fiber with minimum distortion and interference.

This module is optimized for DVI video signals using 850 nm VCSEL technology and multimode fibers. Standard DVI and four LC interface connectors are built in for easy installation. It is designed to send signals from the TX module to the RX module in a one-way direction.

This optical DVI extender supports up to 1920 x 1200 resolution and 500 m distance with 50/125 um multimode fibers.

Lead-Free

DVI-LCTX-500M-1
DVI-LCRX-500M-1

~ Fiber cables not included ~

Key Features

- 850 nm technology with LC multimode fibers
- Up to 1920x1200 resolution and 500 m distance
- DVI-D single link
- Pseudo DDC for EDID support*
- Not HDCP compliant
- 100 – 240 VAC to 5 VDC power supply included
- RoHS compliant, CE and FCC approved
- Compact size: 90 x 40 x 20 mm

* Virtual EDID data structure is incorporated inside the TX module to provide pseudo monitor ID to the host computer. This virtual EDID data enables the display to support various video modes such as VGA, SVGA, … and WUXGA.

Applications

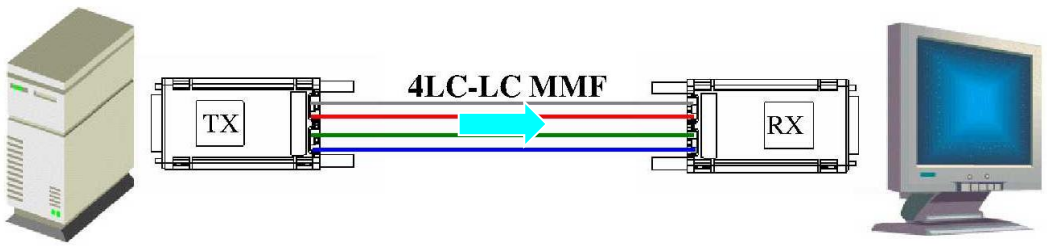
- ✓ PC to monitor
- ✓ DVD or video game player to LCD TV
- ✓ Video surveillance link
- ✓ Remote monitor for warehouse and control
- ✓ Home entertainment systems

Ordering Information

Part Number: DVI-LCTX-500M-1
Optical DVI TX module, 850 nm, 500 m, -10-50°C

Part Number: DVI-LCRX-500M-1
Optical DVI RX module, 850 nm, 500 m, -10-50°C

System Application Example



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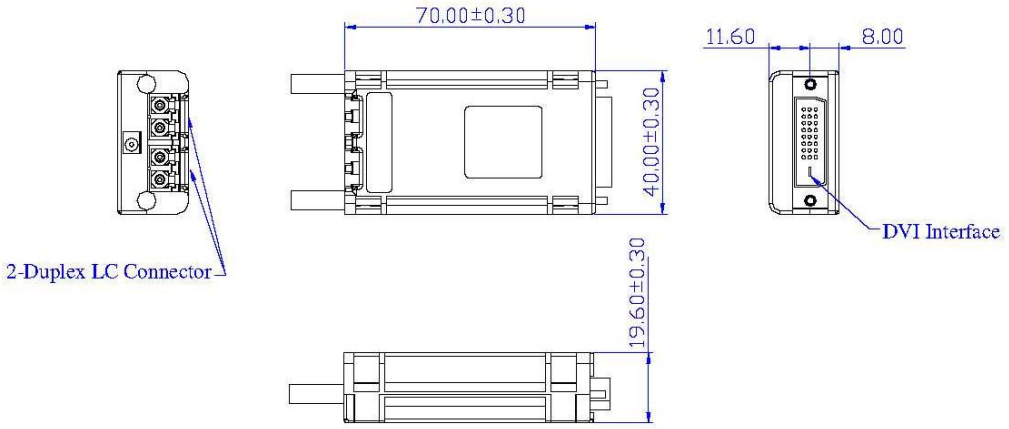
Operating Conditions

Parameter	Min.	Typical	Max.	Units
Operate Temperature	-10	25	50	°C
Storage Temperature	-20	25	75	°C
Supply Current (TX)	---	180	210	mA
Supply Current (RX)	---	280	310	mA

Video Resolution v.s. Transmission Distance

Display	Resolution	Distance (m) with 62.5/125 μm MMF	Distance (m) with 50/125 μm MMF
WUXGA	1920 X 1200 (16:10)	300 m	500 m
UXGA	1600 X 1200 (4:3)	300 m	500 m
TV 1080p	1920 X 1080p (16:9)	300 m	500 m
SXGA	1280 X 1024 (5:4)	400 m	600 m
XGA	1024 X 768 (4:3)	500 m	700 m
TV 1080i	1920 X 1080i (16:9)	500 m	700 m
TV 720p	1280 X 720p (16:9)	500 m	700 m
SVGA	800 X 600 (4:3)	500 m	700 m

Mechanical Dimension



Package List

1.DVI-LCTX-500M-1 optical DVI TX module - 1 unit
2.DVI-LCRX-500M-1 optical DVI RX module - 1 unit
3.5V AC/DC power supply - 2 units
4.LC fiber cables – not included and ordered separately.

Installation Procedure

1.Install four LC fiber cables into the TX and RX modules. Match the number (1,2,3,4) of the TX to RX modules on the same fiber cable to establish a compete TX-RX link.
2.Connect power supply to the AC power outlet and to the RX module first. Do not connect the other power supply to the TX at this time because TX power may be supplied by the PC graphic card via the DVI connection.
3.Plug the TX module to the DVI connector interface of the video source (PC, DVD player …).
4.Plug the RX module to the DVI connector interface of the display device (monitor).
5.Turn on the video source and display device. If there is no display, try to install the power supply to the TX module.
6.Adjust the display resolution for best viewing.

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Description

Built upon OptixCom's optical transceiver technology, the DVI extender module is optimized for sending and receiving high definition video signals. Proprietary digital design is utilized to ensure video transmission over fiber with minimum distortion and interference.

This module is optimized for DVI video signals using 1310 nm laser and singlemode fibers (SMF). Standard DVI and four LC interface connectors are built in for easy installation. It is designed to send signals from the TX module to the RX module in a one-way direction.

This optical DVI extender supports up to 1920 x 1080 resolution and 5 km distance with standard 9/125 um singlemode optical fibers.

Lead-Free

DVI-LCTX-5K-1
DVI-LCRX-5K-1

~ Fiber cables not included ~

Key Features

- 1310 nm technology with LC singlemode fibers
- Up to 1920x1080 resolution and 5 km distance
- DVI-D single link
- Pseudo DDC for EDID support*
- Not HDCP compliant
- 100 – 240 VAC to 5 VDC power supply included
- RoHS compliant, CE and FCC approved
- Compact size: 90 x 40 x 20 mm

* Virtual EDID data structure is incorporated inside the TX module to provide pseudo monitor ID to the host computer. This virtual EDID data enables the display to support various video modes such as VGA, SVGA, … and SXGA.

Applications

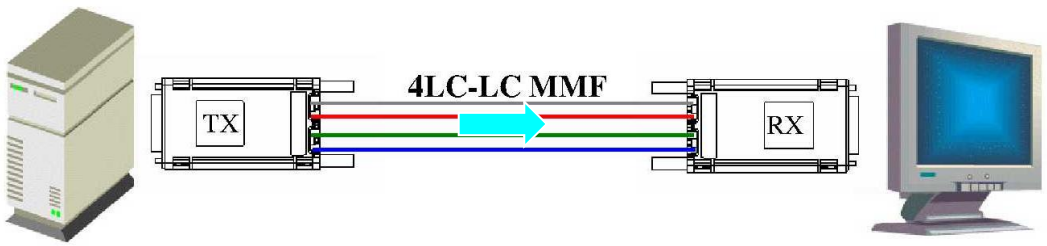
- ✓ PC to monitor
- ✓ DVD or video game player to LCD TV
- ✓ Video surveillance link
- ✓ Remote monitor for warehouse and control
- ✓ Home entertainment systems

Ordering Information

Part Number: DVI-LCTX-5K-1
Optical DVI TX module, 1310 nm, 5 km, -10-50°C

Part Number: DVI-LCRX-5K-1
Optical DVI RX module, 1310 nm, 5 km, -10-50°C

System Application Example



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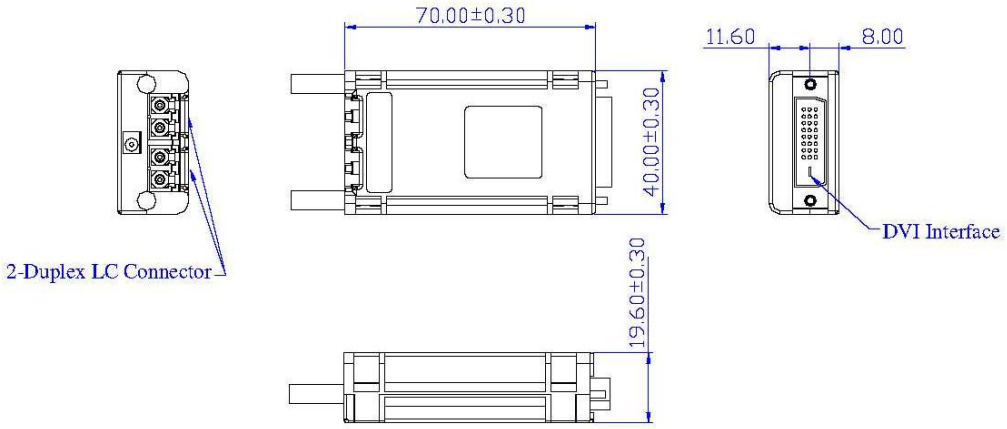
Operating Conditions

Parameter	Min.	Typical	Max.	Units
Operate Temperature	-10	25	50	°C
Storage Temperature	-20	25	75	°C
Supply Current (TX)	---	350	400	mA
Supply Current (RX)	---	250	300	mA

Video Resolution v.s. Transmission Distance

Display	Resolution	Distance (m) with 9/125 μm SMF
TV 1080p	1920 X 1080p (16:9)	5,000 m
SXGA	1280 X 1024 (5:4)	5,000 m
XGA	1024 X 768 (4:3)	5,000 m
TV 1080i	1920 X 1080i (16:9)	5,000 m
TV 720p	1280 X 720p (16:9)	5,000 m
SVGA	800 X 600 (4:3)	5,000 m

Mechanical Dimension



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Package List

1.DVI-LCTX-5K-1 optical DVI TX module - 1 unit
2.DVI-LCRX-5K-1 optical DVI RX module - 1 unit
3.5V AC/DC power supply - 2 units
4.LC fiber cables – not included and ordered separately.

Installation Procedure

1.Install four LC fiber cables into the TX and RX modules. Match the number (1,2,3,4) of the TX to RX modules on the same fiber cable to establish a compete TX-RX link.
2.Connect power supply to the AC power outlet and to the RX module first. Do not connect the other power supply to the TX at this time because TX power may be supplied by the PC graphic card via the DVI connection.
3.Plug the TX module to the DVI connector interface of the video source (PC, DVD player …).
4.Plug the RX module to the DVI connector interface of the display device (monitor).
5.Turn on the video source and display device. If there is no display, try to install the power supply to the TX module.
6.Adjust the display resolution for best viewing.

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Description

Built upon OptixCom's optical transceiver technology, the HDMI extender module is optimized for sending and receiving high definition video signals. Proprietary digital design is utilized to ensure video transmission over fiber with minimum distortion and interference.

This module is optimized for HDMI video signals using 850 nm VCSEL technology and multimode fibers. Standard HDMI type A and dual SC interface connectors are built in for easy installation. It is designed to send signals from the TX module to the RX module in a one-way direction.

OptixCom's optical HDMI modules support industry standards such as TDMS, DDC, CEC, and HPS signals. It's also HDCP compliant.

This optical HDMI extender supports up to 1920 x 1080 resolution and 200 m distance with 62.5/125 um multimode fibers.

Lead-Free

HDI-SCTX-200M-1
HDI-SCRX-200M-1

~ Fiber cables not included ~

Key Features

- 850 nm technology with dual SC multimode fiber
- Up to 1920x1080 resolution and 200 m distance
- TMDS, DDC, CEC, and HPD compliant
- HDCP compliant
- 100 – 240 VAC to 5 VDC power supply included
- RoHS compliant, CE and FCC approved
- Compact size: 145 x 95 x 26 mm

Applications

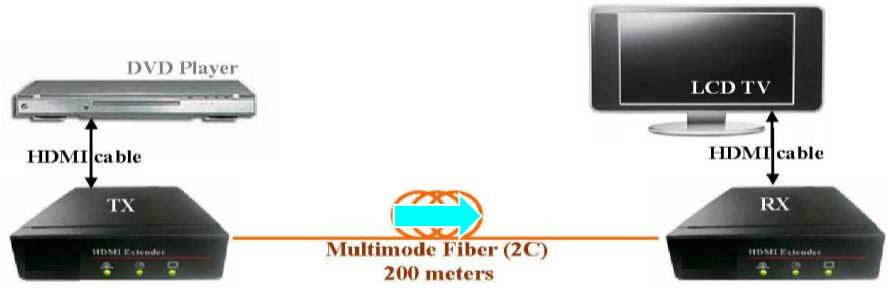
- ✓ PC to monitor
- ✓ DVD or video game player to LCD TV
- ✓ Video surveillance link
- ✓ Remote monitor for warehouse and control
- ✓ Home entertainment systems

Ordering Information

Part Number: HDI-SCTX-200M-1
Optical HDMI TX module, 200 m, -10-50°C

Part Number: HDI-SCRX-200M-1
Optical HDMI RX module, 200 m, -10-50°C

System Application Example



Operating Conditions

Parameter	Min.	Typical	Max.	Units
Operate Temperature	-10	25	50	°C
Storage Temperature	-20	25	75	°C
Supply Current (TX)	---	600		mA
Supply Current (RX)	---	600		mA

Package List

1.HDI-SCTX-200M-1 optical HDMI TX module - 1 unit
2.HDI-SCRX-200M-1 optical HDMI RX module - 1 unit
3.5V AC/DC power supply - 2 units
4.HDMI Type A cables – not included and ordered separately.
5.Dual SC fiber cables – not included and ordered separately.

Installation Procedure

1.Install two SC fiber cables into the TX and RX modules. Make sure to match the same fiber cable from the TX to RX modules to establish a compete TX-RX link.
2.Connect the HDMI cables from the video source (PC, DVD player …) to the HDMI TX module and from the HDMI RX module to the display device (monitor).
3.Connect power supply to the AC power outlet and to the TX and RX modules.
4.Turn on the video source and display device. Adjust the display resolution for best viewing.

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Description

Built upon OptixCom's optical transceiver technology, this extender module is specifically designed for sending and receiving composite video signals. Proprietary digital design is utilized to ensure video transmission over fiber with minimum distortion and interference.

This product is designed to send signals from the TX module to the RX module in the one-way direction. Each module is equipped with the following: four video channels, one RS422/RS485 control line, and one FC type optical connector interface.

This optical extender is plug and play and supports NTSC video for up to 20 km distance with 9/125 um single mode fibers (SMF).

Lead-Free

CVI-FCTX-20K-1
CVI-FCRX-20K-1

~ Fiber cables not included ~

Key Features

- 20 km transmission distance
- 1310/1550 nm technology with FC SMF
- NTSC video format with 8 MHz bandwidth
- 4X BNC video I/O connectors
- 1X RS422/RS485 control line
- 1X FC optical fiber interface connector
- 100 – 240 VAC to 5 VDC power supply included
- RoHS compliant
- Compact size: 158 x 81 x 30 mm

Applications

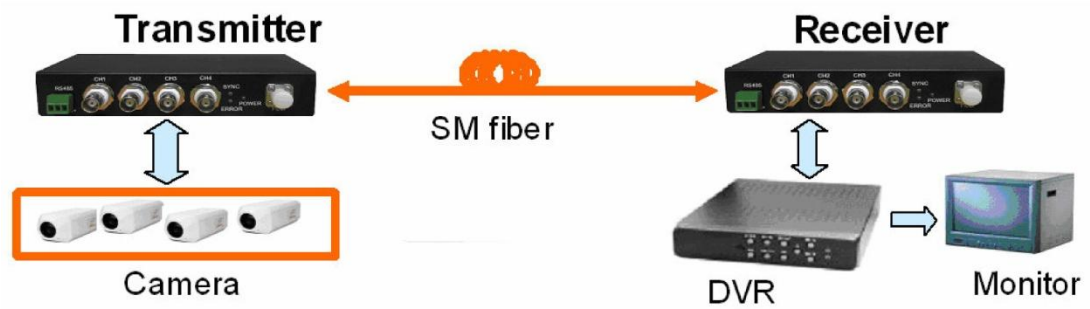
- ✓ Video surveillance link
- ✓ Remote monitor for warehouse and control
- ✓ Home entertainment systems

Ordering Information

Part Number: CVI-FCTX-2K-1
Optical Composite video TX extender module, 20 km, -10-65°C

Part Number: CVI-FCRX-2K-1
Optical Composite video RX extender module, 20 km, -10-65°C

System Application Example



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Operating Conditions

Parameter	Min.	Typical	Max.	Units
Operate Temperature	-10	25	65	°C
Storage Temperature	-20	25	85	°C
Signal to Noise Ratio	---	50	---	dB
BNC Impedance	---	75	---	Ohm
Output Voltage	---	1	---	V

Package List

1.CVI-FCTX-20K-1 optical composite video/audio TX module - 1 unit
2.CVI-FCRX-20K-1 optical composite video/audio RX module - 1 unit
3.5V AC/DC power supply - 2 units
4.Simplex FC fiber cables – not included and ordered separately.
5.RS422/485 control cable – not included and ordered separately.

Description

Built upon OptixCom's optical transceiver technology, this extender module is specifically designed for sending and receiving composite video and audio signals. Proprietary digital design is utilized to ensure video and audio transmission over fiber with minimum distortion and interference.

This product is designed to send signals from the TX module to the RX module in the one-way direction. Each module is equipped with the following: four video and audio channels, one RS422/RS485 control line, and one FC type optical connector interface.

This optical extender is plug and play and supports NTSC video for up to 20 km distance with 9/125 um single mode fibers (SMF).

Lead-Free

CVA-FCTX-20K-1
CVA-FCRX-20K-1

~ Fiber cables not included ~

Key Features

- 20 km transmission distance
- 1310/1550 nm technology with FC SMF
- NTSC video format with 8 MHz bandwidth
- 4X BNC video I/O connectors
- 4X 3.5 mm phone jack audio connectors
- 1X RS422/RS485 control line
- 1X FC optical fiber interface connector
- Stereo line In/out
- 100 – 240 VAC to 5 VDC power supply included
- RoHS compliant
- Compact size: 232 x 82 x 30 mm

Applications

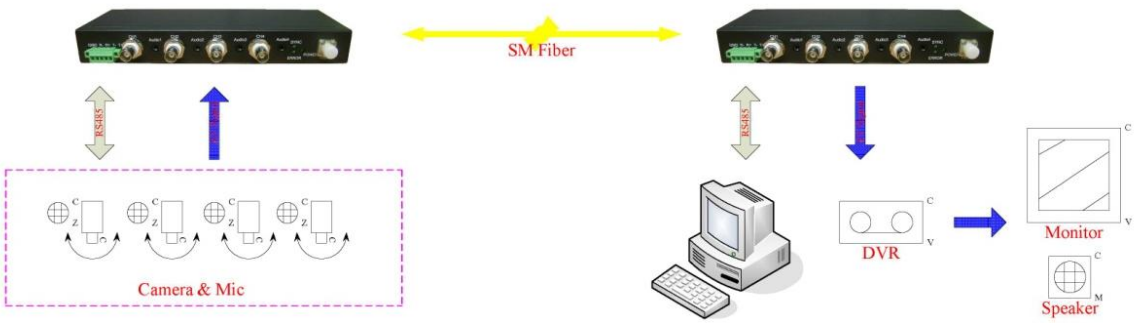
- ✓ Video surveillance link
- ✓ Remote monitor for warehouse and control
- ✓ Home entertainment systems

Ordering Information

Part Number: CVA-FCTX-20K-1
Optical Composite video/audio TX extender module, 20 km, -10-65°C

Part Number: CVA-FCRX-2K-1
Optical Composite video/audio RX extender module, 20 km, -10-65°C

System Application Example



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Operating Conditions

Parameter	Min.	Typical	Max.	Units
Operate Temperature	-10	25	65	°C
Storage Temperature	-20	25	85	°C
Signal to Noise Ratio	---	50	---	dB
BNC Impedance	---	75	---	Ohm
Frequency Response	20	---	20,000	Hz
Output Voltage	---	1	---	V

Package List

1.CVA-FCTX-20K-1 optical composite video/audio TX module - 1 unit
2.CVA-FCRX-20K-1 optical composite video/audio RX module - 1 unit
3.5V AC/DC power supply - 2 units
4.Simplex FC fiber cables – not included and ordered separately.
5.RS422/485 control cable – not included and ordered separately.