Optical DVI Extender

- **For connections of LCD displays, projectors, plasma screens and more**
- **Extends DVI connection up to 500 m (700 m with 50/125µm fiber)**
- **High resolution and image quality**
- **No RF interference**
- **Unidirectional transmissioin via 4 multimode fibers (LC connector)**
- **One source (transmitter) can supply several displays**
- **Including external power supply**
- **DVI-D (Digital) single link**

Description
MICROSENS DVI extenders are suited especially for the wide-ranging connection of digital large screens and scoreboards.

The application of DVI extenders is, above all, interesting for the use of big video walls like they are to be found in stadiums, on fairs, with the stage technique, in the outdoor advertising or in airports or railway stations.

DVI stands for Digital Visual Interface and is an interface for the digital transmission of video data.

Resolution – Pseudo EDID support
In the TX module the data structure is illustrated as a virtual data EDID structure. This feature provides for the fact that of the Host receives pseudo monitor information and can thereby put different resolution modes (VGA, SVGA, XGA, SXGA and UXGA ...). The DVI extenders of MICROSENS support the digital standard DVI-D for the single link use with a maximum resolution of 1600x1200 (UXGA). Because with DVI the picture transmission occurs uncompressed, data rates from up to 1.65 Gbps are reached easily.

Single Monitor use
With the application of fiber very slightly spatial separations can be managed by scoreboards and picture sources with distances from up to 700 m. Therefore the supply of the picture data can occur in a well accessible, serviceable area, although the matching great screen is in an exposed area, for example under a hall ceiling.

Multi-monitor use
In addition, passive splitter/ coupler can be used to implement very easily a multi-monitor use, e. g., a video source supplies several displays. For the transmission four fibers which are pursued in a direction are used (unidirectional). The connection occurs with the help of standard LC connectors for multi mode fibers 50/125 µm.

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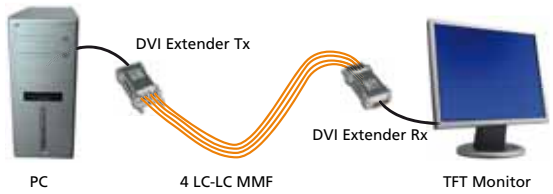
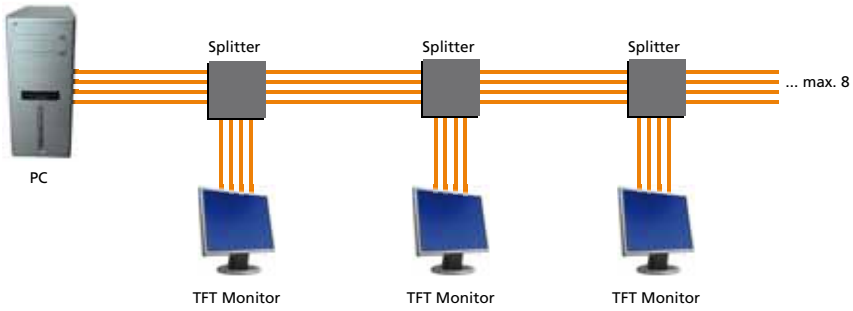
Single Monitor



DVI Extender application: single monitor.

Multiple Monitor



DVI Extender application: multiple monitor.

Applications

- Remote monitor for traffic, industrial and military control
- LCD, projector, plasma display connection
- Large video wall systems
- Multiple monitor for advertising

Ordering Information

Art.-No.	Description	Connectors
MS550010	DVI Extender, Transmitter, max. 700 m, Multimode 850 nm, external power supply	1x DVI, 2x Duplex LC
MS550011	DVI Extender, Receiver, max. 700 m, Multimode 850 nm, external power supply	1x DVI, 2x Duplex LC

Further products on request.

0907/jr/fr

Technical Specifications

Type
DVI Extender via 4 fibers with LC Duplex connector extends DVI connection up to 700 m

Max length
500 m @ XGA (62.5/125 MMF 4-LC)
700 m @ XGA (50/125 MMF 4-LC)

Max resoultion
1920 x 1200 (Single link)

Max DVI bandwidth
1.65 Gbps per channel

EDID support
Pseudo DDC (Customers optional)

HDCP compliant
No

Operating voltage
5 V DC

Supply current
180 mA ±30 TX module
280 mA ±30 RX module

Optical output power
4 channels 850 nm @ -6 dBm (VCSEL)

Operating Temperature
-0°C to 50°C

Storage Temperatute
-20°C to 75°C

Dimension
TX and RX unit:
90 x 40 x 19,5 L x W x H (mm)

Weight
TX unit: 65 g ; RX unit: 65 g

Adaptor Specification
Input: 100~240 V AC (0.2 A 50~60 Hz)
Output: DC 5 V (1.0 A)
DC Jack: Inside 5 V / Outside ground

Resolution and Distance Reference
UXGA (1600 x 1200)
max. distance 300 m (62.5/125) / 500 m (50/125) 1.65 Gbps

SXGA (1280 x 1024)
max. distance 400 m (62.5/125) / 600 m (50/125) 1.25 Gbps

XGA (1024 x 768)
max. distance 500 m (62.5/125) / 700 m (50/125)

SVGA (800 x 600)
max. distance 500 m (62.5/125) / 700 m (50/125)

VGA (640 x 480)
max. distance 500 m (62.5/125) / 700 m (50/125) 250 Mbps

Safety Regulation
CE and FCC approved

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