

# Velocitydvi

Digital Video Extension System-3 A/N+  
Digital Video Extension System-3R A/N+

Powered by  
MRTS Technology



Velocitydvi System-3 A/N+, Transmitter and Receiver

**Velocitydvi System-3 A/N+**  
**One single link DVI display**

- full duplex audio
- 10/100 network extension

**Velocitydvi System-3R A/N+**  
**One single link DVI display with redundant fiber path**

- full duplex audio
- 10/100 network extension

Fiber options include:

- single-mode
- multi-mode

## The Logical Solution - Digital Video, Audio, and Network Extension

The Velocitydvi System-3 A/N+ and -3R A/N+ supports **one single link DVI display, full duplex stereo audio, and 10/100 network extension**. Using multi-mode or single-mode fiber, these systems allow users to locate a DVI monitor and peripherals from just a few meters up to 40 kilometers (24 miles) away from the controlling computer securely without loss of resolution. In addition users have the capability of extending network connections through the Velocitydvi transmitter via fiber to the Velocitydvi receiver.

Powered by Thinklogical's cutting edge, patent-pending MRTS (Multi Rate Transmission System) technology, these extension systems transport every frame of a DVI video stream seamlessly, with no compression or dropped frames. The pristine video quality makes this an ideal solution for a wide range of applications in the broadcast and post-production field, as well as command and control centers, universities, large scale digital signage, and any other commercial A/V application.

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## The System

The Velocitydvi System-3 A/N+ and -3R A/N+ have a simple transmitter/receiver design that allows for ease of installation and straightforward deployment. Depending on the user's infrastructure, the transmitter and the receiver can be connected by multi-mode or single-mode fiber optic cable. The transmitter unit connects to the CPU with the supplied DVI-D cable. In addition, a local port is available on the transmitter. The receiver unit provides connections to the user interface devices. A +5V DC power supply is required on both units.

Options include:

- Velocitydvi System-3 A/N+**      One single link DVI display, full duplex stereo audio, network
- Velocitydvi System-3R A/N+**      One single link DVI display with redundant fiber path, full duplex stereo audio, network

The Velocitydvi System-3 A/N+ product line offers some key features such as audio and network capabilities for A/V applications. This product gives users an audio port, which supports bi-directional stereo analog, and a network port which supports Ethernet connections. In addition, a Neutrik® connector option is offered on the Velocitydvi System-3 A/N+. This option is a more rugged design for fiber with the capability of connecting to an opticalCON DUO connector or the convenience of connecting to a standard LC-type fiber connector.

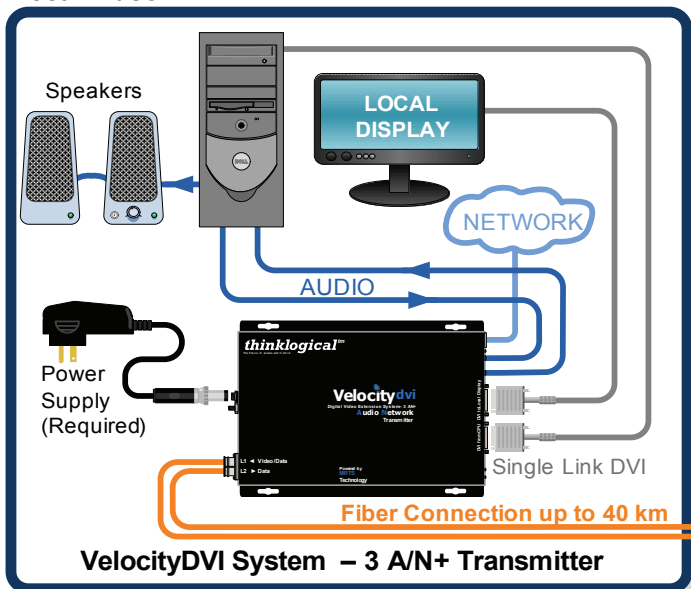
Leveraging standard SFP+ transceivers, the system allows for the usage of either multi-mode or single-mode fiber optic cable.

- **The Velocitydvi System-3 A/N+ requires two fibers** for two way communication. One fiber is dedicated to video, audio line out, network, and DDC (TX to RX), and the second fiber for the microphone, network, and DDC (RX to TX).
- **The Velocitydvi System-3R A/N+ require four fibers** for two way communication.

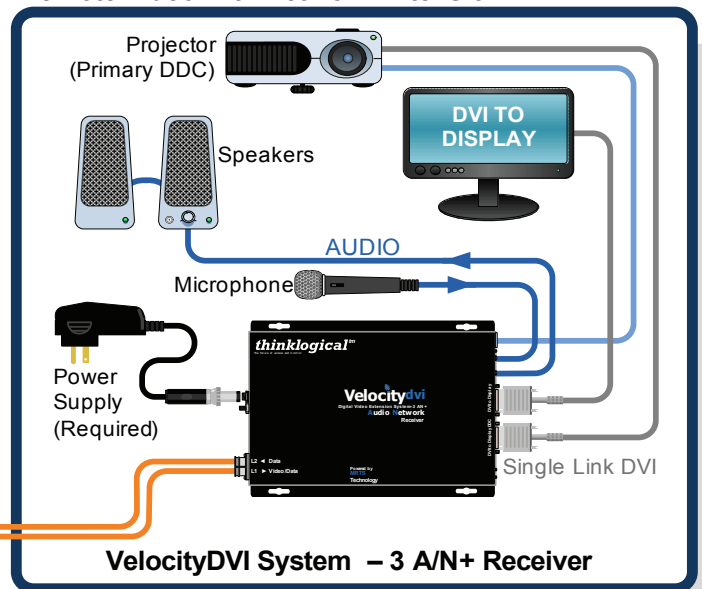
(For one way communication, fewer fibers can be used.)

EDID (Extended Display Identification Data) information is provided to the CPU by either a generic table stored inside the transmitter, or from a display connected to the transmitters local port. Also, the added capability of active DDC allows the remote monitor to send its display capabilities to the CPU. Multi-mode models are available with SC, ST, or LC type fiber connectors; single-mode models are also available.

### Local Video



### Remote Video with Network Extension



KEY: DVI Video Audio Network Optical Fiber Power

Typical Application Extending DVI Video, Audio, and Network Using Velocitydvi System-3 A/N+

## Key Features

- Supports all single link DVI video resolutions
- MRTS technology 6.22 Gbps allows for full frame rate transmission of uncompressed DVI
- Signal transmission via fiber optic cable; no RF interference
- Requires one, two, or four fiber optic cables depending on application
- Flawless image quality with no frame dropping
- Extends signals up to:
  - 750 meters using SX+ multi-mode fiber
  - 1000 meters using eSX+ multi-mode fiber
  - 40 kilometers using single-mode fiber
- Local video port on the transmitter
- Additional video output on the receiver
- Audio and network port
- DDC2B/EDID compliant
- Simple plug and play
- Available with SC-, ST-, or LC-type fiber connectors
- Available with a Neutrik® opticalCON DUO fiber connector for rugged applications (on Velocitydvi System-3 A/N+ only)

## Specifications

<b>Video Resolution</b>	DVI-D all single link DVI resolutions	
<b>Operating Temperature</b>	0° – 50°C (32° – 122°F)	
<b>Humidity</b>	5 – 95% RH, non-condensing	
<b>Dimensions</b>	<b>System-3 A/N+ and System-3R A/N+</b>	<b>System-3 A/N+ with Neutrik</b>
Height:	1.19 inches (30.23 mm)	2 inches (50.8 mm)
Depth:	7 inches (177.8 mm)	7 inches (177.8 mm)
Width:	7.49 inches (190.25 mm) (tolerance: ± .039 inches; .1 mm)	7.49 inches (190.25 mm)
<b>Weights</b>	<b>System-3 A/N+ and System-3R A/N+</b>	<b>System-3 A/N+ with Neutrik</b>
Weight (per unit):	1.5 lbs (0.68 kg)	2.0 lbs (0.907 kg)
Shipping Weight:	9 lbs (4.08 kg) pair	9.5 lbs (4.3 kg) pair
<b>Power Consumption</b>	10 watts per unit	
<b>Supply Voltage</b>	+5.0 V DC	
<b>DC Adapter</b>	AC/DC adapter universal input 90-264 VAC	
<b>Optical Cable</b>	single-mode and multi-mode over one, two, or four fibers (fiber is available, not supplied)	
<b>Optical Distance</b>	up to 50 meters using 62.5/125um, type OM1 up to 350 meters using 50/125um, type OM2 up to 750 meters using 50/125um, type OM3 up to 1000 meters using 50/125um, type OM3 enhanced up to 40 kilometers using 9/125um, type OS2 (single-mode)	
<b>Compliance</b>	approvals for US, Canada, and European Union	
<b>Warranty</b>	12 months from date of shipment - extended warranties available	

## Connectors

### Transmitter

Video	DVI-D (2)
Power	2.5mm power connector
Fiber Connectors	SC/APC for single-mode LC, SC or ST for multi-mode opticalCON DUO connector for Neutrik® option
Audio MIC	3.5mm jack
Audio LINE	3.5mm jack
Network Port	RJ45

### Receiver

Video	DVI-D (2)
Power	2.5mm power connector
Fiber Connectors	SC/APC for single-mode LC, SC or ST for multi-mode opticalCON DUO connector for Neutrik® option
Audio MIC	3.5mm jack
Audio LINE	3.5mm jack
Network Port	RJ45

**Cables Included:** DVI-D male to male, 2 meters  
Stereo audio cable, 3.5mm to 3.5mm, 2 meters (2)  
Network cable, RJ45 to RJ45 , 2.1 meters (2)  
DB9F to RJ45 adapter  
DB9M to RJ45 adapter

## Velocitydvi System-3 A/N+ Ordering Information

### Velocitydvi System-3 A/N+: single-mode

#### Part Number Description

VEL-AN0S03-SCRX	Velocity 3 DVI Video Extender Receiver, Single Link DVI, AUX DVI Output, DDC, Network, Audio, Single Mode, SC/APC
VEL-AN0S03-SCTX	Velocity 3 DVI Video Extender Transmitter, Single Link DVI, Local DVI Port, DDC, Network, Audio, Single Mode, SC/APC
VEL-AN0S03-NKRX	Velocity 3 DVI Video Extender Receiver, Single Link DVI, AUX DVI Output, DDC, Network, Audio, Single Mode, Neutrik® LC/APC
VEL-AN0S03-NKTX	Velocity 3 DVI Video Extender Transmitter, Single Link DVI, Local DVI Port, DDC, Network, Audio, Single Mode, Neutrik® LC/APC

### Velocitydvi System-3 A/N+: multi-mode

#### Part Number Description

VEL-AN0M03-LCRX	Velocity 3 DVI Video Extender Receiver, Single Link DVI, AUX DVI Output, DDC, Network, Audio, Multi-Mode, LC
VEL-AN0M03-LCTX	Velocity 3 DVI Video Extender Transmitter, Single Link DVI, Local DVI Port, DDC, Network, Audio, Multi-Mode, LC
VEL-AN0M03-SCRX	Velocity 3 DVI Video Extender Receiver, Single Link DVI, AUX DVI Output, DDC, Network, Audio, Multi-Mode, SC
VEL-AN0M03-SCTX	Velocity 3 DVI Video Extender Transmitter, Single Link DVI, Local DVI Port, DDC, Network, Audio, Multi-Mode, SC
VEL-AN0M03-STRX	Velocity 3 DVI Video Extender Receiver, Single Link DVI, AUX DVI Output, DDC, Network, Audio, Multi-Mode, ST
VEL-AN0M03-STTX	Velocity 3 DVI Video Extender Transmitter, Single Link DVI, Local DVI Port, DDC, Network, Audio, Multi-Mode, ST
VEL-AN0M03-NKR	Velocity 3 DVI Video Extender Receiver, Single Link DVI, AUX DVI Output, DDC, Network, Audio, Multi-Mode, Neutrik® LC
VEL-AN0M03-NKTX	Velocity 3 DVI Video Extender Transmitter, Single Link DVI, Local DVI Port, DDC, Network, Audio, Multi-Mode, Neutrik® LC

## Velocitydvi System-3R A/N+ Ordering Information

### Velocitydvi System-3R A/N+: single-mode

Part Number	Description
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VEL-ANRS03-SCRX	Velocity 3 DVI Video Extender Receiver, Redundant DVI, AUX DVI Output, DDC, Network, Audio, Single Mode, SC/APC
VEL-ANRS03-SCTX	Velocity 3 DVI Video Extender Transmitter, Redundant DVI, Local DVI Port, DDC, Network, Audio, Single Mode, SC/APC

### Velocitydvi System-3R A/N+: multi-mode

Part Number	Description
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VEL-ANRM03-LCRX	Velocity 3 DVI Video Extender Receiver, Redundant DVI, AUX DVI Output, DDC, Network, Audio, Multi-Mode, LC
VEL-ANRM03-LCTX	Velocity 3 DVI Video Extender Transmitter, Redundant DVI, Local DVI Port, DDC, Network, Audio, Multi-Mode, LC
VEL-ANRM03-SCRX	Velocity 3 DVI Video Extender Receiver, Redundant DVI, AUX DVI Output, DDC, Network, Audio, Multi-Mode, SC
VEL-ANRM03-SCTX	Velocity 3 DVI Video Extender Transmitter, Redundant DVI, Local DVI Port, DDC, Network, Audio, Multi-Mode, SC
VEL-ANRM03-STRX	Velocity 3 DVI Video Extender Receiver, Redundant DVI, AUX DVI Output, DDC, Network, Audio, Multi-Mode, ST
VEL-ANRM03-STTX	Velocity 3 DVI Video Extender Transmitter, Redundant DVI, Local DVI Port, DDC, Network, Audio, Multi-Mode, ST

### Velocitydvi System-3 A/N+, -3R A/N+ optics options: single-mode

Part Number	Description
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VOP-S05	Velocity 3 AN Optics Option for Transmitter or Receiver, Single Mode, Dual Fiber, 10KM, SC/APC
VOP-S11	Velocity 3 AN Optics Option for Transmitter or Receiver, Single Mode, Dual Fiber, 10KM, Neutrik® LC/APC

### Velocitydvi System-3 A/N+, -3R A/N+ optics options: multi-mode

Part Number	Description
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VOP-M04	Velocity 3 AN Optics Option for Transmitter or Receiver, Multi-Mode, Dual Fiber, 1000M, LC or Neutrik® LC
VOP-M01	Velocity 3 AN Optics Option for Transmitter or Receiver, Multi-Mode, Dual Fiber, 1000M, SC or ST

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