# NVD110DBM

Minitype 8-bit Digital 1-ch Video with 1-ch bidirectional Data





# Description

The NVD110DBM, NeTrans' 8-Bit Digital Video and Data Modules, features high-performance laser-based optics for the clearest, most reliable data transmission over one fiber for both single and multi-mode with no video degradation over the entire operating distance (up to 20km), as well as RS-232/422/485 serial data ports.

This plug-and-play product provides instant product compatibility for most major security manufacturers' equipment and reliability in harsh environments, a perfect compliment to any commercial, government or intelligent transportation application. This small, but mighty, design also comes ready for wall-mounted applications.

These units are compatible with the NVD110DB transmitters/receivers and NVD110DB-XXR3 receivers.



## **Features**

#### Video

- NTSC or PAL video standards supported
- Non-compressed 8-bit digitally encoded video
- No video degradation over the maximum operating distance

#### Data

- Meets EIA RS-232/422/485 specifications
- Full RS-485 Tri-state support
- Half or full-duplex operation
- Transparent to data encoding
- Data rates from 0 to 115.2kbps

## Optical

- One fiber design
  - High performance laser-based optics
- Multimode or Singlemode
- ST or FC connectors available

#### **Robust Design**

- > Plug-and-Play design, no in-field adjustments required.
- Minitype for Wall-mount installation
- ▶ Wide operating temperature range of -40°C to +75°C
- Designed for use in harsh environments

#### Local Diagnostics

 Service-friendly LED status indicators on both front and rear of the module

#### Warranty

Comprehensive Lifetime Warranty

# Typical Application



Line Carrier Detection

## Specifications

#### Video

Number of Channels	1		
Format	NTSC/PAL		
Input/Output	1 Volt pk-pk (75 ohms)		
Bandwidth	6MHz		
Differential Gain	<2%		
Differential Phase	<1 Degree Typical		
SNR-CCIR weighted	>53dB		
Data Number of Channels	1		
	1 Bi-directional Duplex		
Number of Channels	1 Bi-directional Duplex RS232, RS422, RS4852 or 4-wire Tri-state		
Number of Channels Data Direction	•		
Number of Channels Data Direction Data Interface	RS232, RS422, RS4852 or 4-wire Tri-state		

RS485 (2/4-wire) Tri-state output

Video Signal Indication (Presence Absence)	/ Green/Red LED lit	
Data TX / RX Status	Green/Red LED lit	
Power	Green / On	
Connectors		
Video Input / Output	BNC	
Optical Input / Output	ST (standard), FC (optional)	
Data Input / Output	7-pin screw terminal	
Power	2-pin screw terminal	
Electrical and Mechai	nical	
	12VDC @500mA	
Power	12VDC @500mA	
Power Dimensions(WxHxD)	12VDC @500mA 107x 70 x 38mm(Max)	

-40 °C to +85 °C

0 to 95% non-condensing > 100,000 hours

# Ordering Information

Fiber Type	Part Number	Description	Wavelengths	Optical Power Budget	Max. Distance (Km)
Multi-mode (62.5/125µm)	NVD110DBM-SMT NVD110DBM-SMR	Minitype 1 - ch Video Transmitter with 1-ch bidirectional Data Transceiver Minitype 1 - ch Video Receiver with 1-ch bidirectional Data Transceiver	1310   1550nm	12dB	4
Single-mode (9/125µm)	NVD110DBM-SST NVD110DBM-SSR	Minitype 1 - ch Video Transmitter with 1 - ch bidirectional Data Transceiver Minitype 1 - ch Video Receiver with 1 - ch bidirectional Data Transceiver	1310 1550nm	18dB	20
Options • ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT.   • Please feel free to consult factory if longer transmission distance is required.   • Power Adaptor   • Power adaptor is included.					

Storage Temp

MTBF

Relative Humidity

Notes: • Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.

- Operating distance of multimode is limited by the characteristics of the fiber bandwidth.
- Power adaptor is manufactured by third party and is supplied with fitted screw terminal output cables.
- Please feel free to consult factory for any special requirement and customization.





#### OT Systems Ltd., June 2012

Due to continuous improvement, all product specifications are subject to change without further notice.