

## Description

The NVD100, NeTrans' 8-Bit Digital Video transmission product, 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).

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. The product features a universal design that makes NVD100 field-configureready for both rack-mount and stand-alone applications. The NeTrans Intelligent Rack design offers remote network diagnostics to maintain and manage system health and hot-swappability.

These units are compatible with the NVD100Micro transmitters/receivers and NVD100-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

### Optical

- One fiber design
- High performance laser-based optics
- Multimode or Singlemode
- Internal SFP optical module
- ST, FC or SC connectors available

### **Robust Design**

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- Plug-and-Play design, no in-field adjustments required.
  - 2-in-1 modular design for standalone or rack-mount installation
- Hot-swappable design
- Wide operating temperature range of -40°C to +75°C
- Designed for use in harsh environments

### Local and Remote Diagnostics

- Service-friendly LED status indicators on both front and rear of the module
- Remote health and status monitoring via Intelligent Rack System Diagnostics and Monitoring (SDM) Module

### Warranty

Comprehensive Lifetime Warranty

# Typical Application



### 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	

#### LED

Video Signal Indication (Presence/ Absence)	Green/Red LED lit			
Power	Green / On			
Connectors				
Video Input / Output	BNC			
Optical Input / Output	t / Output ST (standard), FC or SC (optiona			
Power (Standalone)	2-pin screw terminal			
Power (Rack-Mount)	10-pin smart bus connector			

### Environmental

Shipping Weight

Operating Temp	-40 °C to +75 °C
Storage Temp	-40 ° C to +85 ° C
Relative Humidity	0 to 95% non-condensing
MTBF	> 100,000 hours

0.55kg

## **Ordering Information**

Fiber Type	Part Number	Description	Wavelengths	Optical Power Budget	Max. Distance (Km)	No. of slots	
NVD100-SMT		1 - ch Video Transmitter	1310nm	10-10	4	1	
(62.5/125µm)	NVD100-SMR	1-ch Video Receiver	1310nm 12dB				
Single-mode (9/125µm)	NVD100-SST	1 - ch Video Transmitter	1310nm 18dB	18dB	20	1	
	NVD100-SSR	1-ch Video Receiver					
<ul> <li>Options</li> <li>ST type connector is standard. For FC type, specify "F" in the suffix. E.g. FMT. For SC type, specify "C" in the suffix. E.g. CMT.</li> <li>Please feel free to consult factory if longer transmission distance is required.</li> </ul>							
Power Adaptor       • Power adaptor (GS40A12) is to be purchased separately. Please refer to accessories section for the details.         Rack Mount Chassis       • Intelligent Rack Mount Chassis (NR-C14) is to be purchased separately. Please refer to accessories section for the details.							

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.