# NV100 / NV200 / NV400 / NV800

10-bit Digital 1/2/4/8-ch Video







NeTrans' 10-Bit Digital Video transmission transmitters, receivers and multiplexer products feature high-performance laser-based optics for the clearest, most reliable data transmission in both single and multi-mode with no video degradation over the entire operating distance (up to 20km).

This plug-and-play product family provides instant 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 offering two great features: a variety of optical and connector options for field-configure-readiness; and a modular construction equipped 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.







### Features

#### Video

- NTSC or PAL video standards supported
- Non-compressed 10-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**

- Plug-and-Play design, no in-field adjustments required.
- > 2-in-1 modular design for standalone or rack-mount installation
- Hot-swappable design
- Solid-state current limiters
- 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	1/2/4/8
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	ST (standard), FC or SC (optional)
Power (Standalone)	2-pin screw terminals
Power (Rack-mount)	10-pin smart bus connector

<b>Electrical and Mech</b>	nanical —————————			
NV100, NV200, NV400				
Power	12VDC @ 500mA Max.			
Dimensions(WxHxD)	158.4 x 25.4 x 231.8mm(Max)			
Shipping Weight	0.55kg			
NV800				
Power	12VDC @ 500mA Max.			
Dimensions(WxHxD)	158.4 x 50.8 x 231.8mm(Max)			
Shipping Weight	0.80kg			
Environmental -				
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			

## Ordering Information

Fiber Type	Part Number	Description	Wavelengths	Optical Power Budget	Max. Distance (Km)	No. of slots
Multi-mode (62.5/125µm)	NV100-SMT NV100-SMR	1 - ch Video Transmitter 1 - ch Video Receiver	1310 nm	12dB	4	1
	NV200-SMT NV200-SMR	2 - ch Video Transmitter 2 - ch Video Receiver	1310nm	10dB	3	1
	NV400-SMT NV400-SMR	4 - ch Video Transmitter 4 - ch Video Receiver	1310nm	8dB	2	1
	NV800-SMT NV800-SMR	8-ch Video Transmitter 8-ch Video Receiver	1310nm	6dB	1	2
Single-mode (9/125μm)	NV100-SST NV100-SSR	1 - ch Video Transmitter 1 - ch Video Receiver	1310nm	18db	20	1
	NV200-SST NV200-SSR	2 - ch Video Transmitter 2 - ch Video Receiver	1550nm	14db	20	1
	NV400-SST NV400-SSR	4-ch Video Transmitter 4-ch Video Receiver	1550nm	14db	20	1
	NV800-SST NV800-SSR	8-ch Video Transmitter 8-ch Video Receiver	1550nm	14db	20	2

Options

- 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.
- Please feel free to consult factory if longer transmission distance is required.

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
  - 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.