

NV010DB / NV040DB

Serial Data Transceivers



Features

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
- ▶ 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
- ▶ 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

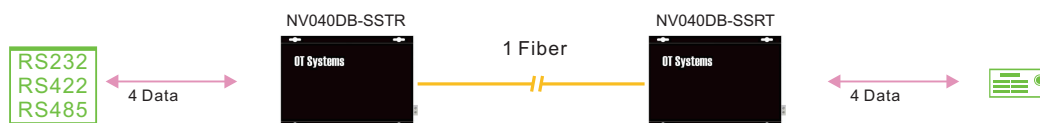
Description

OT Systems NV010DB/NV040DB data series offers a plug-and-play solution that provides instant product compatibility for EIA compliant serial interface equipment and reliability in harsh environments, a perfect compliment to any commercial, government or intelligent transportation application. The NV010DB/NV040DB transmits up to 4-channels of bi-directional serial data.

The NeTrans' Data Series offers compatibility for the three most common data sources and does not require the input and output data interfaces to be the same. Compatible data interfaces include EIA RS-232, RS-422 and (2- or 4- wire) RS-485 with tri-state, data interfaces and are transparent to data protocol.

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.

Typical Application



Specifications

Data

Number of Channels	1 / 4
Data Direction	Bi-directional Duplex
Data Interface	RS232, RS422, RS485 2 or 4-wire Tri-state
Selection Method	DIP switch-selectable
Data Rate	0~115,200bps
Data Protocol	Protocol transparency
Line Carrier Detection	RS485 (2/4-wire) Tri-state output

LED

Data TX / RX Status (Presence/Absence)	Green/Red LED lit
Power	Green/On

Connectors

Data Input / Output	7-pin screw terminals
Optical Input / Output	ST (standard), FC or SC (optional)
Power (Standalone)	2-pin screw terminal block
Power (Rack-Mount)	10-pin smart bus connector

Electrical and Mechanical

NV010DB	
Power	12VDC @ 500mA Max.
Dimensions(WxHxD)	158.4 x 25.4 x 231.8mm(Max)
Weight	0.74kg
NV040DB	
Power	12VDC @ 500mA Max.
Dimensions(WxHxD)	158.4 x 50.8 x 231.8mm(Max)
Weight	1.07kg

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)	NV010DB-SMTR	1-ch bidirectional Data Transceiver	1310 1550nm	12dB	4	1
	NV010DB-SMRT	1-ch bidirectional Data Transceiver				
	NV040DB-SMTR	4-ch bidirectional Data Transceiver	1310 1550nm	12dB	4	2
	NV040DB-SMRT	4-ch bidirectional Data Transceiver				
Single-mode (9/125µm)	NV010DB-SSTR	1-ch bidirectional Data Transceiver	1310 1550nm	19dB	20	1
	NV010DB-SSRT	1-ch bidirectional Data Transceiver				
	NV040DB-SSTR	4-ch bidirectional Data Transceiver	1310 1550nm	19dB	20	2
	NV040DB-SSRT	4-ch bidirectional Data Transceiver				

- 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 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.