

FEATURES

- ▷ Ability to force 10M/100M/1G/10G speeds on UTP port.
- ▷ Auto-negotiation on UTP port.
- ▷ Supports both half and full duplex on UTP port.
- ▷ MTU 1500 bytes
- ▷ Energy-Efficient Ethernet and energy detect support
- ▷ Full support of MACsec
- ▷ PTP/1588v2 support
- ▷ 10G Base T over 100m of CAT6A cable
- ▷ Compact Size
- ▷ Rugged Steel Enclosure
- ▷ Highest of Quality Components

APPLICATIONS

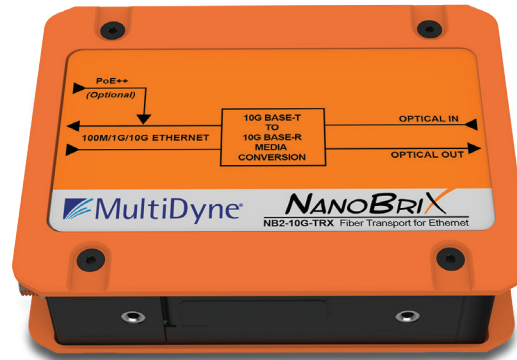
- ▷ Live Broadcast
- ▷ Arenas and Stadiums
- ▷ Shared Control Rooms
- ▷ Campus Facilities



Ethernet Panel



Optical Panel



NB2-10G-TRX

The NB2-10G-TRX provides a cost-effective miniature solution to extend 10G Ethernet signals over fiber optic cable.

On one side of the unit a standard RJ45 connector provides the 10G copper interface while the SFP is plugged into the opposite side.

A green power LED is illuminated when power is detected at the input. Two blue LEDs are also available to indicate network presence for either 100M/1G or 10G connections.

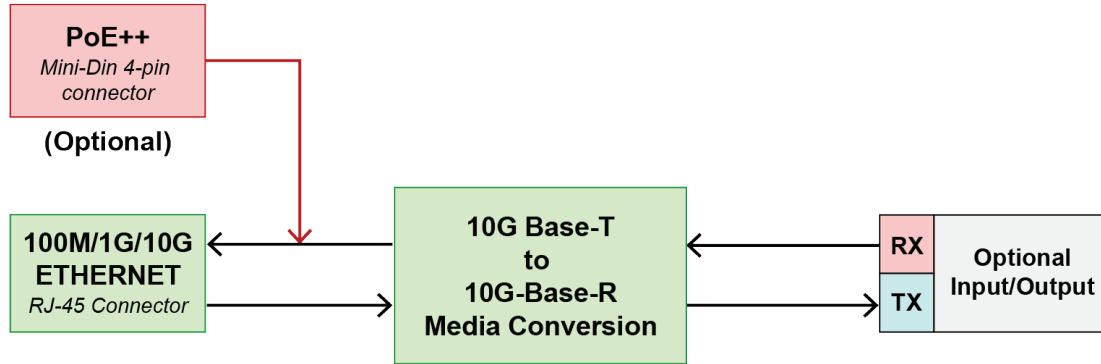
The SFP's are sold separately and allow for standard 1310 nm, WDM 1270/1330 nm, all 18 CWDM available wavelengths for single mode fiber and 850nm for multimode fiber. For applications where ST connections are required the NB2-ST-ADAPTER converts the SFP to 1 ST connector. In this configuration WDM SFP's are required.

For applications where POE++ is required the NB2-10G-TRX-POE comes with a 56 VDC power supply allowing for up to 90-Watt output on the RJ45 to power external devices.

The NB2-10G-TRX can be outfitted with Single mode SFP's reaching cable distances up to 10KM or up to 300 Meters with Multimode SFP's and cable installed.

The NB2-10G-TRX is portable by nature, the unit also comes with a magnetic strip to allow for quick mounting to the side of a rack or stacking with other units in the NB2 family.

BLOCK DIAGRAM



TECHNICAL SPECIFICATIONS

Ethernet/SFP

Supported SFPs	10G SFP+ Single mode / Multimode
Supported Ethernet Standards	10GBASE-T 5GBASE-T 2.5GBASE-T 1000BASE-T 100BASE-TX 10BASE-Te
Cable reach 10G	100m over CAT6A and CAT7 cable 55m over CAT 6 Best effort over CAT5e
Cable reach 5G, 2.5G	100m over CAT5e or better cable
Cable reach 10M, 100M, 1G	130m over CAT5e or better cable
PoE standards	Fully compatible 803.2af, 803.2at and 802.3bt. Up to 90 Watt output

Mechanical, Electrical, Environmental

Length/Width/Height	4.39" x 3.35" x 1.06"
Weight	8.1oz
Power	5-15VDC Locking 2,5/5,5mm barrel USB-C 56V PoE Power supply
Power consumption	3.85Watt @ 10G 2.75Watt @ 10M, 100M, 1G
Operating temperature	-20 to +45°C (-4 to +113°F)
Storage temperature	-40 to +70°C (-40 to +158°F)
Operation Humidity	Max. 90% (noncondensing)

ORDERING INFORMATION

Part #	Description
NB2-10G-TRX	NanoBrix 10G Transceiver Module. SFP Sold Separately. Includes Power Supply.
NB2-10G-TRX-SM	NanoBrix 10G Transceiver, 2 Single-mode fibers for operation, LC connectors. Includes OPT-00121 SFP & Power Supply.
NB2-10G-TRX-MM	NanoBrix 10G Transceiver, 2 Multimode fibers for operation, LC connectors. Includes SFP & Power Supply.
NB2-10G-TRX-POE-SM	NanoBrix 10G PoE Transceiver, 2 Single-mode fibers for operation, LC connectors. Includes OPT-00121 SFP & Power Supply.
NB2-10G-TRX-POE-MM	NanoBrix 10G PoE Transceiver, 2 Multimode fibers for operation, LC connectors. Includes SFP & Power Supply
NB2-10G-TRX-WDMA	NanoBrix 10G Transceiver, 1270/1330nm WDM, 1 Single-mode fiber for operation, LC connector. Includes OPT-00122 SFP & Power Supply.
NB2-10G-TRX-WDMB	NanoBrix 10G Transceiver, 1330/1270nm WDM, 1 Single-mode fiber for operation, LC connector. Includes OPT-00123 SFP
NB2-10G-TRX-POE-WDMA	NanoBrix 10G PoE Transceiver, 1270/1330nm WDM, 1 Single-mode fiber for operation, LC connector. Includes OPT-00122 SFP & Power Supply.
NB2-10G-TRX-POE-WDMB	NanoBrix 10G PoE Transceiver, 1330/1270nm WDM, 1 Single-mode fiber for operation, LC connector. Includes OPT-00123 SFP & Power Supply.
NB2-ST-ADAPTER	Standard ST adapter to convert SFP to 1 ST requires WDM A/B SFP's
OPT-00121	10G SFP TRX 1310nm, MSA, 10 Km
OPT-00122	10G SFP TRX WDM A, 1270/1330nm, MSA, 10 Km
OPT-00123	10G SFP TRX WDM B, 1330/1270nm, MSA, 10 Km
OPT-00127	SFP, 10G, Transceiver, Multimode 850m, MSA
OPT-00075	10G SFP TRX CWDM – 1271nm, MSA, 10 Km
OPT-00076	10G SFP TRX CWDM – 1291nm, MSA, 10 Km
OPT-00077	10G SFP TRX CWDM – 1311nm, MSA, 10 Km
OPT-00078	10G SFP TRX CWDM – 1331nm, MSA, 10 Km
OPT-00079	10G SFP TRX CWDM – 1351nm, MSA, 10 Km
OPT-00080	10G SFP TRX CWDM – 1371nm, MSA, 10 Km
OPT-00081	10G SFP TRX CWDM – 1391nm, MSA, 10 Km
OPT-00082	10G SFP TRX CWDM – 1411nm, MSA, 10 Km
OPT-00083	10G SFP TRX CWDM – 1431nm, MSA, 10 Km
OPT-00084	10G SFP TRX CWDM – 1451nm, MSA, 10 Km
OPT-00085	10G SFP TRX CWDM – 1471nm, MSA, 10 Km
OPT-00086	10G SFP TRX CWDM – 1491nm, MSA, 10 Km
OPT-00087	10G SFP TRX CWDM – 1511nm, MSA, 10 Km
OPT-00088	10G SFP TRX CWDM – 1531nm, MSA, 10 Km
OPT-00089	10G SFP TRX CWDM – 1551nm, MSA, 10 Km
OPT-00090	10G SFP TRX CWDM – 1571nm, MSA, 10 Km
OPT-00091	10G SFP TRX CWDM – 1591nm, MSA, 10 Km
OPT-00092	10G SFP TRX CWDM – 1611nm, MSA, 10 Km