

# NETLion 1000

### Product overview

NETLion is a development tool for 100/1000BASE-T1 networks. It supports the user for logging and analyzing of data traffic or converts 100/1000BASE-T1 physics to 100BASE-TX/1000BASE-T Ethernet, which is common in the IT area.

#### Operating Mode Dual Media Converter

Up to two 100/1000BASE-T1 signals are converted to 100BASE-TX/1000BASE-T Ethernet, which is common in the IT area.

#### Operating Mode Network Tap

During the operating mode Network Tap data is decoupled of both 100/1000BASE-T1 line ends and transmitted on the two 100BASE-TX/1000BASE-T interfaces. The network tap operates on layer 1.

#### Discover errors and software interface

With the NETLion Webinterface you can see signal quality, occurring errors, as well as the status of the device. Also NETLion comes with a common gateway interface to change settings of the NETLion.

NETLion has a Configuration Ethernet Port where you can access the Webinterface.

#### For use in the automotive area

NETLion can be used for the development desk and even for use in harsh environments. Power supply and operating temperature range are designed for the permanent integration in such environments.



Illustration 1: NETLion 1000

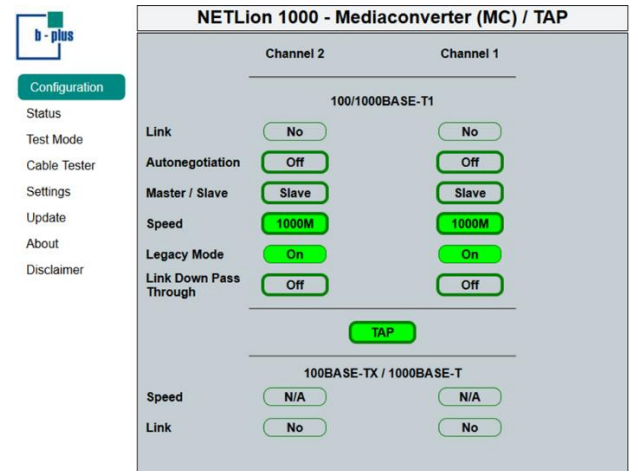


Illustration 2: NETLion 1000 Webinterface

### Function modes and highlights

**Two devices in one**

- Media Converter
- 100/1000BASE-T1 network Tap

**LEDs for**

- 100/1000BASE-T1 Signal Quality
- Operation Mode
- Status
- Master/Slave

**Web & SW-interface**

- For the view of diagnosis data and further PHY adjustments

**Robust Hardware**

- Extended operating temperature range
- Wide range power supply

**Simple Configuration**

- Basic configuration without PC (DIP switches)
- Extended Configuration and diagnosis via NETLion Webinterface

Alle Daten bei 25°C Umgebungstemperatur, falls nicht anders angegeben. / All data at nominal input and 25° C ambient temperature, if not marked otherwise. • Alle Daten dienen nur Informationszwecken und sind nicht als zugesicherte Eigenschaften aufzufassen. / All data for information purposes only, no assured characteristics. • Technische Änderungen ohne vorherige Ankündigung sowie Irrtümer vorbehalten. / Technical modifications without notice and errors reserved. • Belastung mit Extremwerten über einen längeren Zeitraum kann die Zuverlässigkeit beeinflussen. / Strain with extreme values for a longer period may affect the reliability. • Alle Trademarks und Logos sind Eigentum der jeweiligen Unternehmen. / All trademarks and logos are property of the concerning companies. In case of doubts the German version of the document is binding. © b-plus GmbH • Apr-19 Version: 1.1

### Technical data

#### Operating temperature range

-40°C..+75 °C

#### Power Supply

9V..48V

#### Certification

CE, FCC, VCCI

#### Mechanical dimensions

120mm x 105mm x 26mm

### Interfaces

Number	Description	Function
2	100/1000BASE-T1	Data traffic according operating mode
2	100BASE-TX/1000BASE-T	Data traffic according operating mode
1	Ethernet	Configuration and analysis (Measurement)
16	LEDs	Signal quality and information LED

### Side view



Illustration 3: Interface for power, DIP switches for link configuration and 100/1000BASE-T1 interfaces

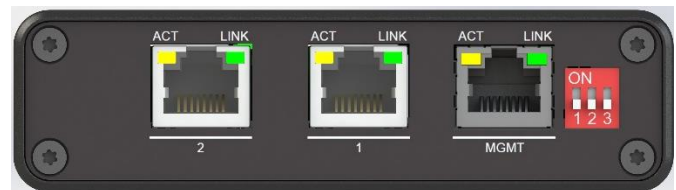
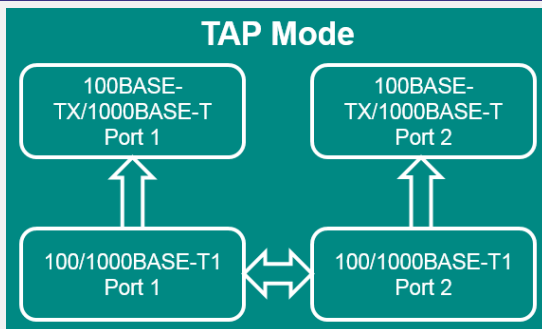


Illustration 4: 100Base-TX/1000BASE-T interfaces, Configuration interface Ethernet, DIP switches for overall settings

#### Possible DIP switch configurations

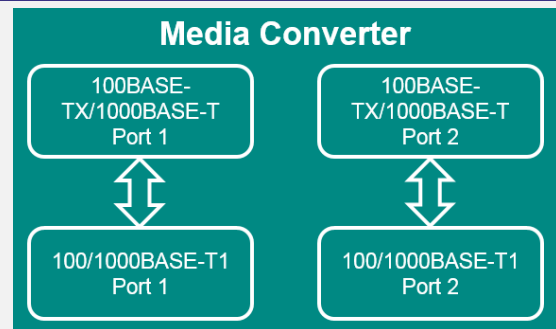
Master / Slave / Autonegotiation / AutoDetect (separate per channel) / Operation mode: Tap / Media converter

### Block Diagram of the system



Decoupling of data of one 100/1000BASE-T1 line in both directions

- Without influence of the communication



Conversion of two 100/1000BASE-T1 signals in standard 100BASE-TX/1000BASE-T Ethernet signals (bi-directional)

### Ordering information

Name	Article-no.	Description
NETLion1000 C2T - 100/1000BASE-T1	B18005-NEL-001-0001	100/1000BASE-T1 – 100BASE-TX/1000BASE-T Tap & Dual Media Converter
NETLion1000 C2 - 100/1000BASE-T1	B18005-NEL-001-0002	100/1000BASE-T1 – 100BASE-TX/1000BASE-T Dual Media Converter