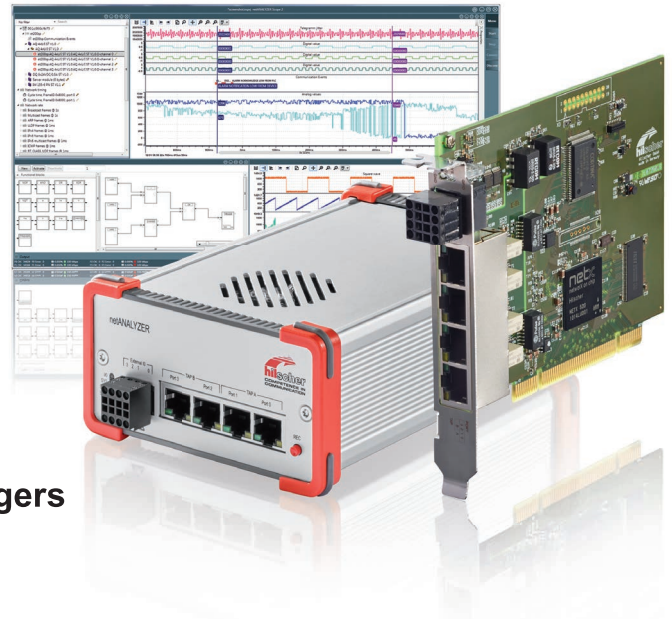


netANALYZER

Ethernet analysis made easy

- Comprehensive analysis of Real-Time-Ethernet systems
- Passive, without influence to network or PLC
- For development, commissioning, trouble-shooting and service
- Intuitive graphic display
- Process data, communication events, network load and jitter measurement
- Continuous recording via customizable triggers



Powerful analysis with simple operating concept

The netANALYZER is a tool for the simple analysis of Real-Time Ethernet networks. The scope of delivery includes a capture-hardware for recording the telegrams on the network as well as a graphical user software for Windows with extensive analysis functions. Of course, the netANALYZER hardware can also be used together with other analysis software such as Wireshark.

Using netANALYZER and the add-on software netANALYZER Scope you always have your Ethernet network at your fingertips.

Measure important key figures such as process data, communication protocol events, network load or jitter without influence to network or PLC. Very simple, using the intuitive graphic interface with oscilloscope functions.

To narrow down to sporadic errors netANALYZER box supports autonomous operation without PC. Thus, one can record telegram traffic quickly in the automation floor by a simple touch of a button. With the help of the powerful trigger function the netANALYZER can remain in a plant for a period of time, allowing facilitated troubleshooting. On the occurrence of trigger events the netANALYZER automatically generates telegram snapshots that can be interpreted later using the netANALYZER Scope software.



netANALYZER - Ethernet analysis made easy

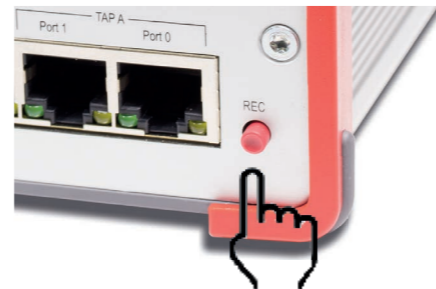


netANALYZER Hardware

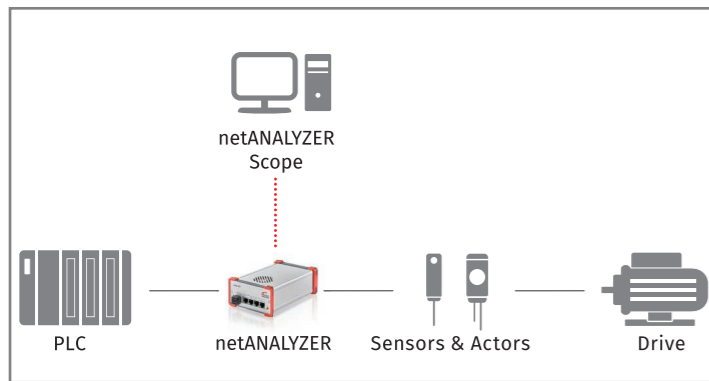
- ▶ Passive recording with zero-delay < 1 ns
- ▶ Capture up to 4 Ethernet ports and 4 digital switching events
- ▶ ± 5 ns measurement accuracy, 1 ns resolution
- ▶ Detailed error information for each telegram
- ▶ Rugged carrying case for field use

Autonomous operation without PC

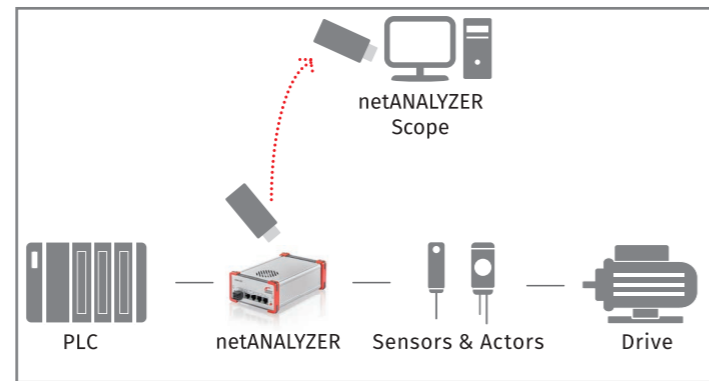
- ▶ Quick and easy recording „on site“ without connected PC
- ▶ Continuous operation with customizable triggers
- ▶ Creating telegram snapshots at triggering events



netANALYZER connection diagram



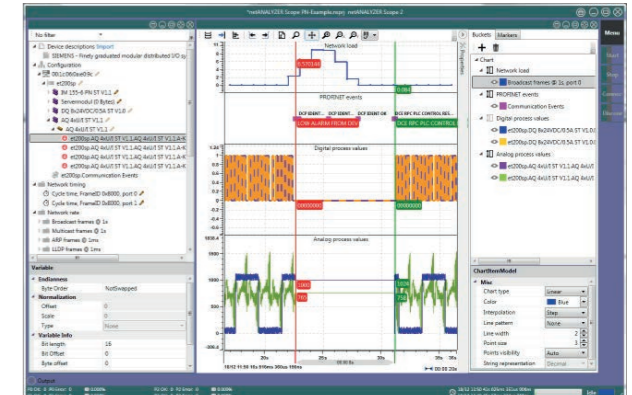
interactive operation



autonomous operation

netANALYZER Scope

- ▶ Intuitive graphic interface
- ▶ Eliminates manual analysis of endlessly telegram records
- ▶ No deep knowledge of the Ethernet technology required to use the software
- ▶ Common display on a timeline of:
 - ▶ PROFINET process data and events
 - ▶ EtherCAT process data
 - ▶ Free definable data content of any Ethernet protocol
 - ▶ Network load
 - ▶ Telegram jitter
 - ▶ Telegram delay
- ▶ Comprehensive trigger functions
- ▶ Import of Telegram records for graphical analysis
- ▶ Save and load complete analysis projects



Open to all applications

- ▶ Open driver API allows use of recording hardware in own measurement applications
- ▶ Out-of-the-box supported third-party software:
 - ▶ Wireshark
 - ▶ MECHATROLINK-III Analyzer
 - ▶ Sercos Monitor
 - ▶ TCN Ethernet StreamAnalyzer



Get to know the netANALYZER and netANALYZER Scope

- ▶ Online videos with many useful tips and tricks on YouTube
- ▶ Learn the handling of netANALYZER and netANALYZER Scope in our product trainings



Technical Data / Product Overview

Technical Data	Parameter	NANL-C500-RE	NANL-B500G-RE
	Form factor	PC Card	Metal Box
	Ethernet Channels	4x Ethernet 10/100BASE-TX RJ45	
	Digital Channels	4x digital I/O 3.3 V	4x digital IO 3.3 V / 24 V configurable
	TAPs	2, integrated with zero-delay < 1 ns	
	Time Stamp	± 5 ns measurement accuracy, 1 ns resolution	
	PC Interface	PCI V2.3 / 33 MHz	Gigabit-Ethernet 1000BASE-T RJ45
	Recording interface for autonomous operation	n/a	USB 2.0 (hard disc or memory stick) max. 500 mA or external supply data rate approx. 50 % network load when recording on one TAP
	Supply Voltage	3.3 V / 800 mA	nominal 24 V DC / 700 mA / 16,8 W, range 18 V ... 30 V DC
	Operating Temperature	0° C - 55° C	
Dimensions (LxWxH)	137 x 107 x 17,5 mm	173 x 115 x 62 mm	
System Requirements	PC or notebook with the following specifications: Intel-compatible CPU, approx. 2 GHz or faster (depending on the data volume to be analyzed) DirectX 9 compatible graphics device 20 MB available on the hard drive for the netANALYZER software, plus to be recorded data		

netANALYZER Scope	
Recording history and signal quantity	Unlimited, only limited by the PC's memory
Signal type	Input and output process values, network load, telegram jitters, custom telegram data, PROFINET events: alarms, cycle failures, device start up
Prerequisite for live recording	netANALYZER device, NANL-C500-RE or NANL-B500E-RE or NANL-B500G-RE
Full version	Unlimited recording duration Requires netANALYZER device with activated netANALYZER Scope license
Free evaluation version	Limited recording duration Can run with netANALYZER device without netANALYZER Scope license
Offline mode	Without netANALYZER device or netANALYZER Scope license, however stored recordings of any duration can be loaded
Trigger	Freely configurable complex trigger conditions (comparisons, boolean operations, signal changes)
Operating system	Windows 7, Windows 8, Windows 10
Project import	EtherCAT: ENI, PROFINET: GSDML, and/or manual signal configuration, PCAP files

Article Description	Article Number	Article
NANL-C500-RE	7310.100	netANALYZER Card PCI RTE
NANL-B500G-RE	7313.100	netANALYZER Box Gigabit RTE
NANL-B500G-RE CASE	7313.102	Carrying case for netANALYZER Box
LIC/SCP/BS	8582.001	netANALYZER Scope base License plus min. one addon
LIC/SCP/PN	8582.030	netANALYZER Scope addon License PROFINET process data and events
LIC/SCP/ECAT	8582.040	netANALYZER Scope addon License EtherCAT process data
LIC/SCP/CVF	8582.050	netANALYZER Scope addon License Custom value filters
LIC/SCP/PCAP	8582.070	netANALYZER Scope addon License PCAP import
LIC/NANL/SA	8582.060	netANALYZER addon License Autonomous operation NANL-B500G without PC

Note: All technical details are provisional and are subject to changes without any further notification.

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