



miniLAN-485

- ❖ 1x Ethernet Port
- ❖ miniLAN-485 – 1x RS485 Port with Support ASSET, ATS, DOMINUS, GALAXY, HUB-PRO, PERIDECT and other systems, find out more at www.metel.eu
- ❖ miniLAN-232 – 2x RS232 Ports
- ❖ Transparent Transmission Modbus RTU/ASCII/TCP
- ❖ Transfer Rate LAN/RS Port from 3ms



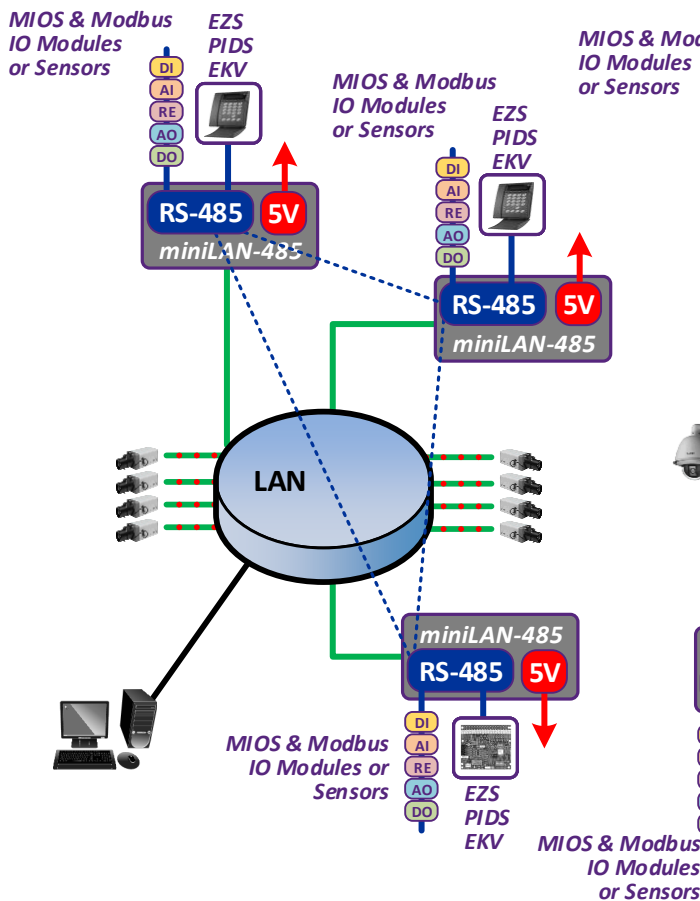
miniLAN-232

- ❖ Overvoltage Protection 30A
- ❖ SNMP, TCP Client/Server
- ❖ Encrypted SNMPv3 Management
- ❖ Operating Range -40°C to +70°C
- ❖ Power Supply 12/24/48VDC or 12/24VAC or PoE Mode B (Pairs 4-5, 7-8)

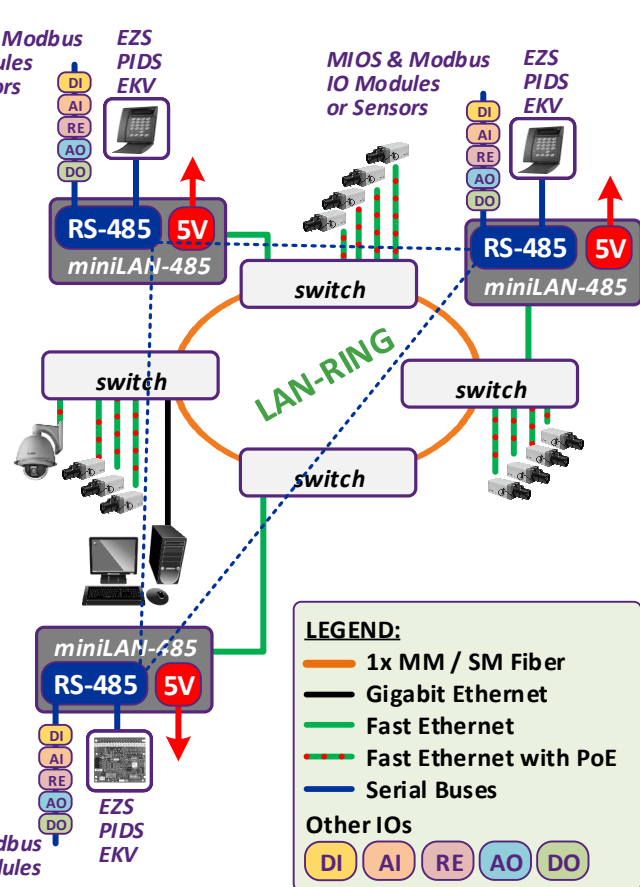
PRODUCT NAME	CODE	SUPPLY
miniLAN-485	2-104-572	10-60VDC/10-30VAC/PoE
miniLAN-232	2-105-572	10-60VDC/10-30VAC/PoE

Holder for Mounting DIN35 and Flat Surface is Included.

RS485 over LAN

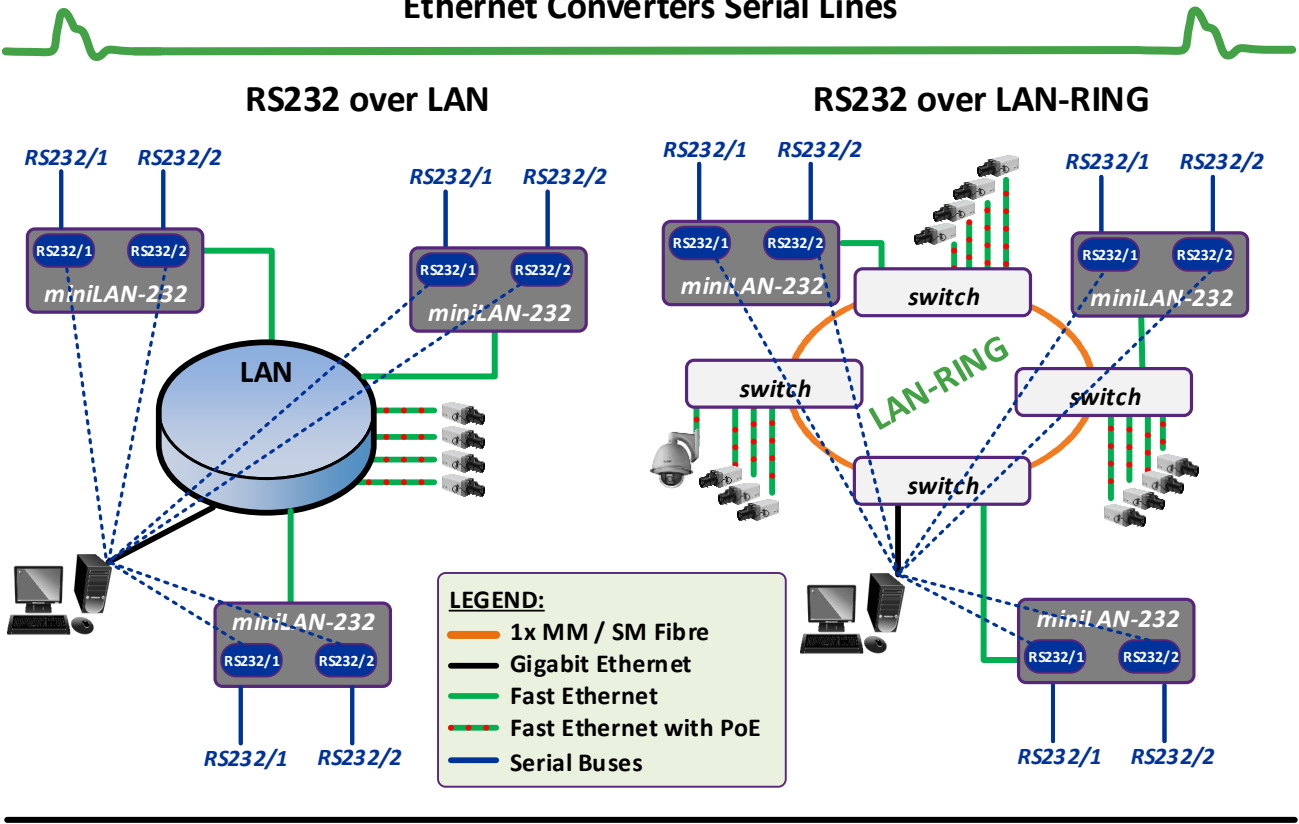


RS485 over LAN-RING



miniLAN

Ethernet Converters Serial Lines

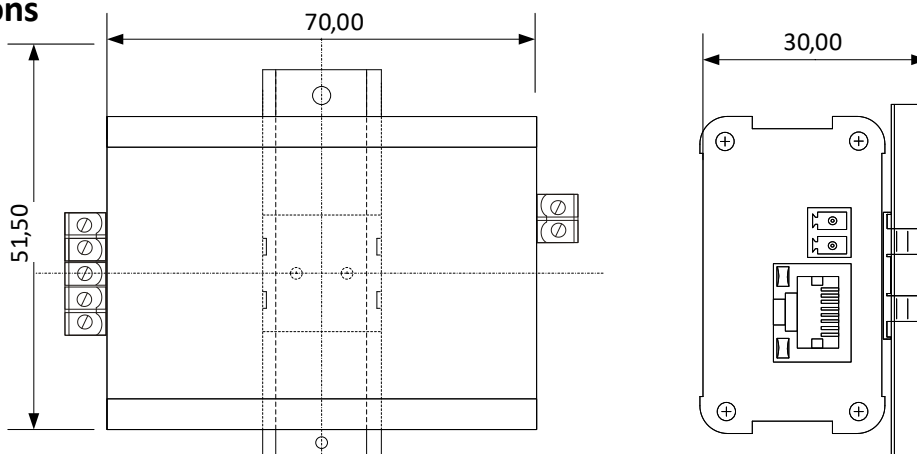


Description and Technical Parameters

MiniLAN-485 and miniLAN-232 are industrial modules for transmission of RS485 or RS232 bus with the option of supplying over Ethernet (PoE-B pairs 4-5, 7-8).

Parameter	Value	Unit	Note
Management Application	SIMULand		Windows Application
RS Ports Speed	1,2 - 57,6	Kbps	Half / Full Duplex (UTP cat.5)
miniLAN-485	1x Half Duplex RS485		
miniLAN-232	2x Full Duplex RS232 Rx/Tx		
Power Supply Voltage	10 - 60 / 10 - 30	VDC / AC	PoE B (Pairs 4-5, 7-8)
Power Consumption	Max. 1	W	
Environment Operational Range	-40...+70	°C	Temperature of Environment
Humidity	Max. 95	%	Non-condensing
Mechanics Dimensions - w / h / d	52 x 32 x 82	mm	
Weight	0,16	kg	
Certification	TÜV		
The producer retains the right to change any technical parameters without previous written or published notification.			

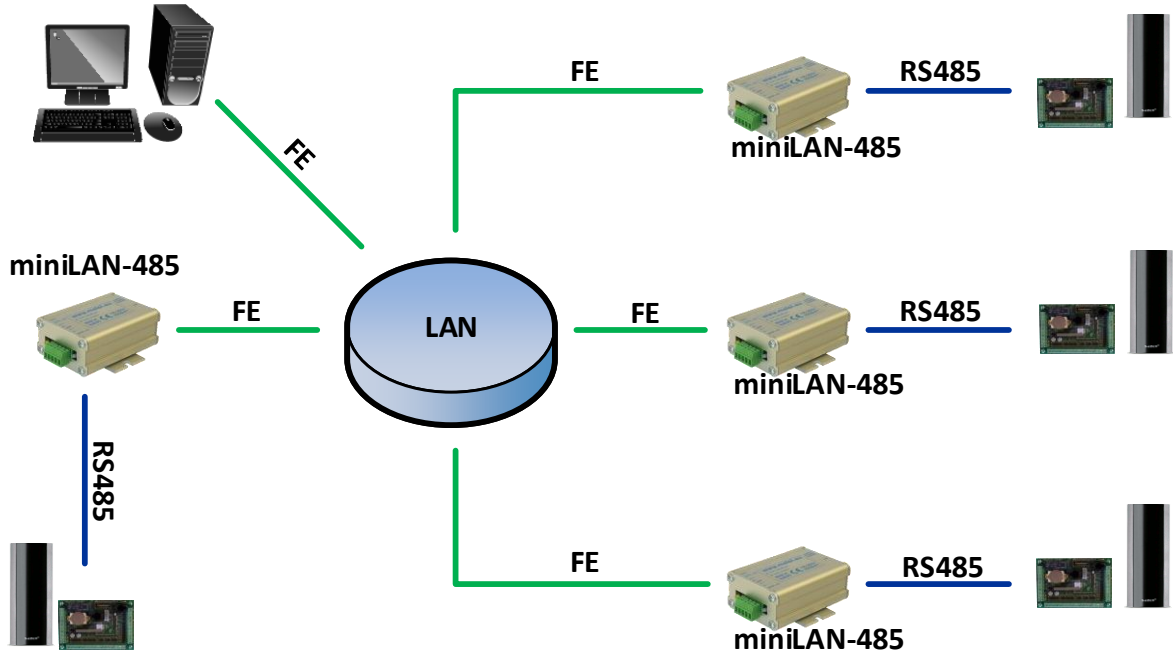
Dimensions



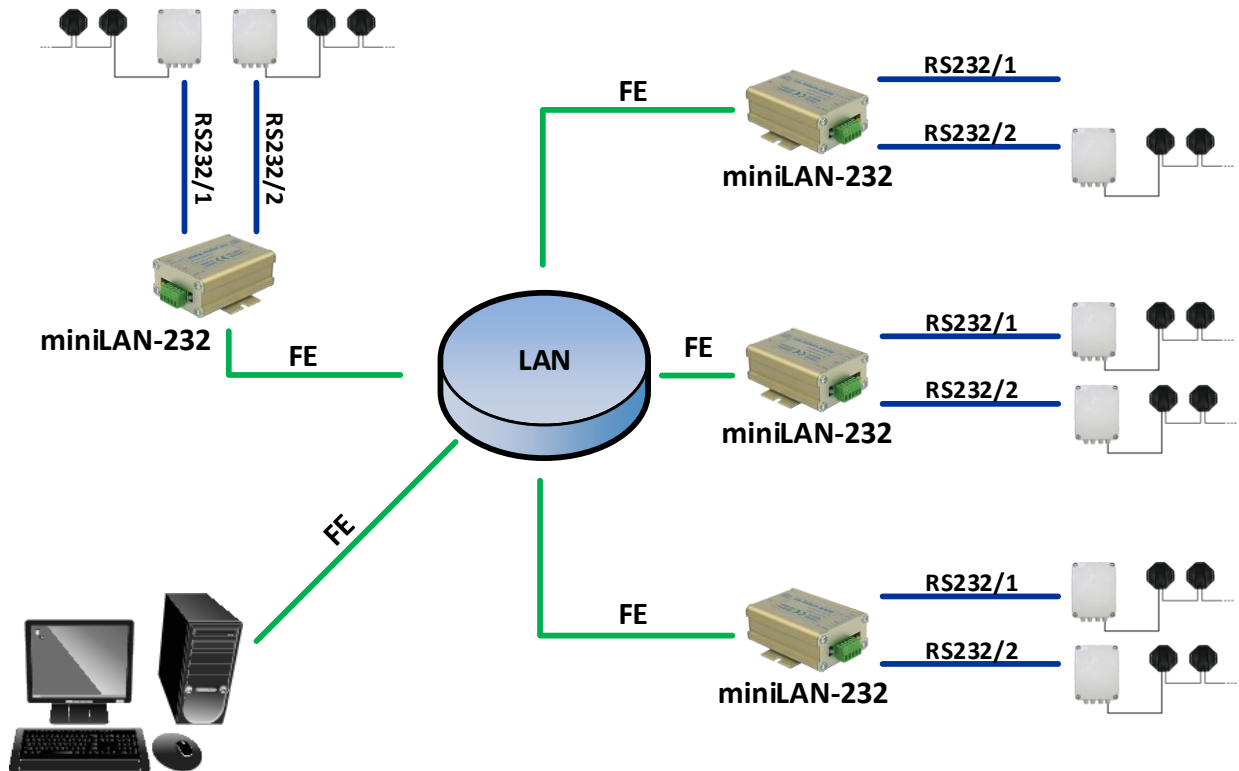
miniLAN

Ethernet Converters Serial Lines

Example of Connection with Access Control System



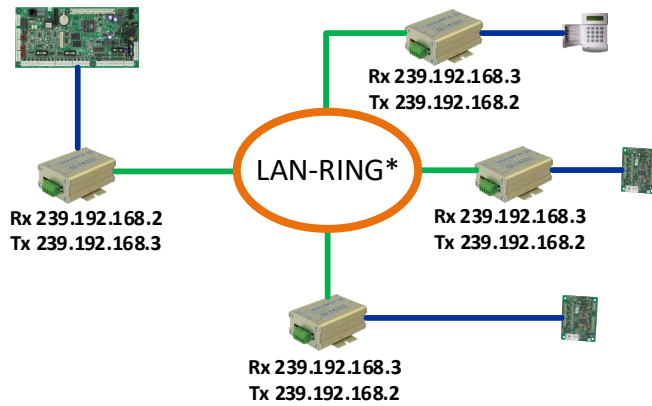
Example with Perimetric System



miniLAN

Ethernet Converters Serial Lines

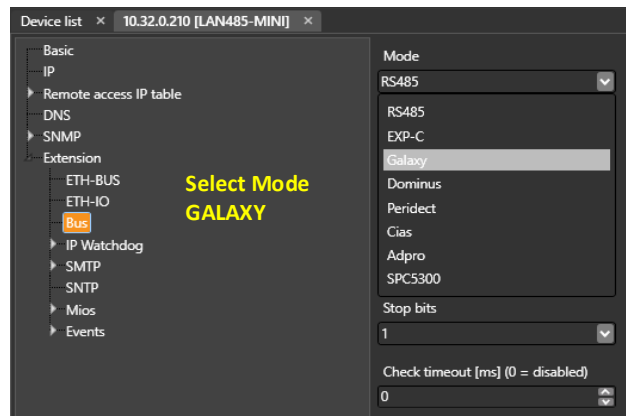
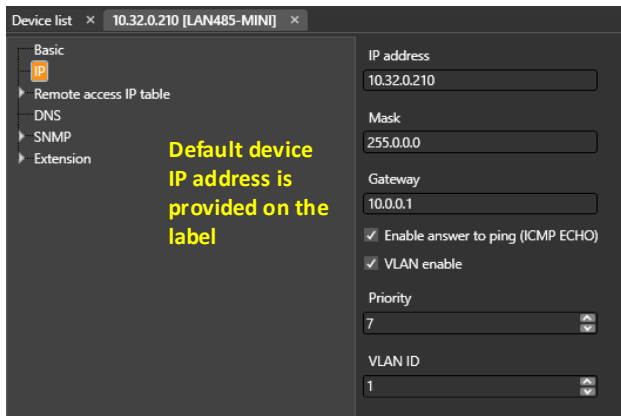
Example of Communication Over UDP for GALAXY System in a SIMULand.v4 Application



LEGEND:

- 1x MM / SM Fiber
- Fast Ethernet
- Fast Ethernet with PoE
- Serial Buses

* When interconnecting the RS485 buses of alarm systems we recommend using only our miniLAN and LAN-RING devices optimized for low delays of RS485 transmission. Find more at www.metel.eu for an up-to-date list of compatible systems that have been tested with our devices.



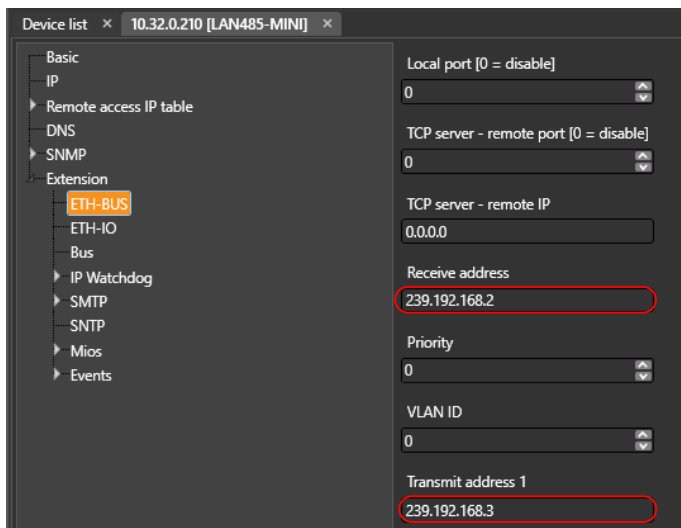
NOTE: If you can not connect to the device check the IP address of the network adapter in your computer; it must be set in the range of the device IP address. Pause or add an exception for the firewall and antivirus program.

Setting of RS485 transmission in UDP mode (multicast)

The setting is very simple and consists of the following steps:

- In menu „Bus/Mode“ set the system you are using. If not provided select “RS485”. If the system is provided in the menu no further setting in menu „Bus“ is needed. The converter sets it automatically.
- In menu „Extension/ETH-Bus“ set receiving and transmitting addresses in range 239.0.0.0 - 239.255.255.255 (multicast).
topology BUS – set the same receiving and transmitting address on all converters.
topology POINT-to-POINT – set the addresses “crosswise”:

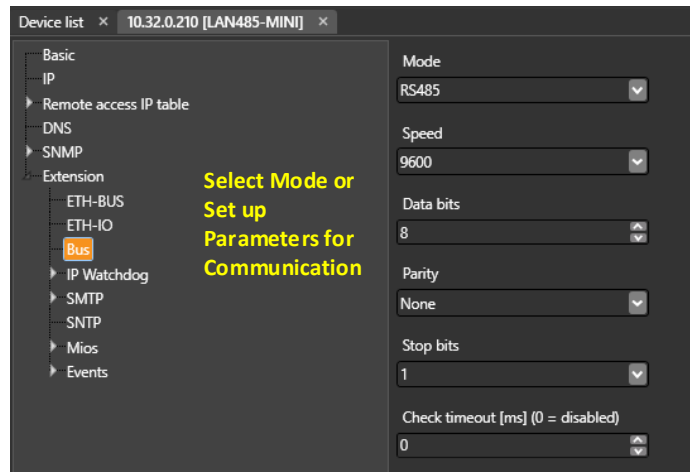
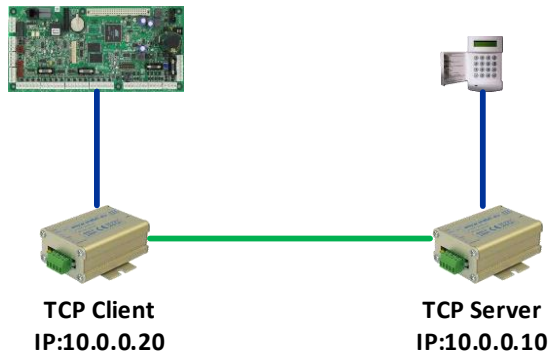
Example: Device 1 receiving address - 239.192.168.2, transmitting address 1 - 239.192.168.3
 Device 2 receiving address - 239.192.168.3, transmitting address 1 - 239.192.168.2



miniLAN

Ethernet Converters Serial Lines

Example of Communication Over TCP

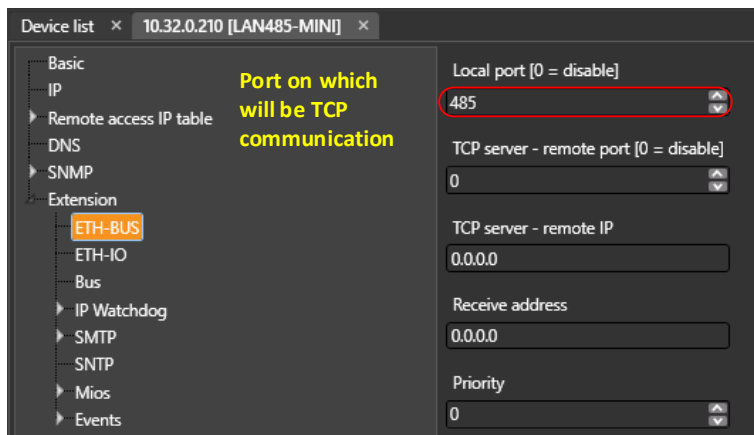


Setting of RS485 Transmission in TCP Mode

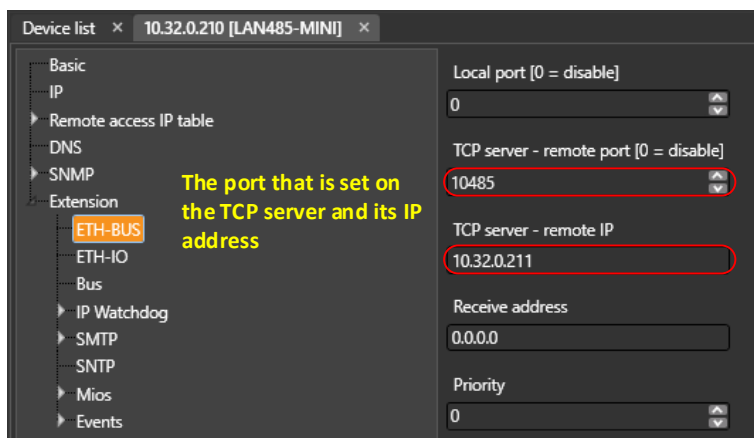
The setting consists of the following steps:

1. It is necessary to decide which device will be server and which will be client. The clients must always perform the first request to the server and thus start up a TCP connection.
2. In menu „Bus/Mode“ set the system you are using. If not provided select “RS485”. If the system is provided in the menu no further setting in menu „Bus“ is needed. The converter sets it automatically.
3. Converter in mode TCP server - in menu „Extension/ETH-BUS“ set the number of port that will be used by the TCP client to establish a connection.
4. Converter in mode TCP client - in menu „Extension/ETH-BUS“ set the number of TCP Server port – Remote port and TCP Server Remote IP address, IP address of the remote TCP server.

miniLAN-485 in TCP Server Mode



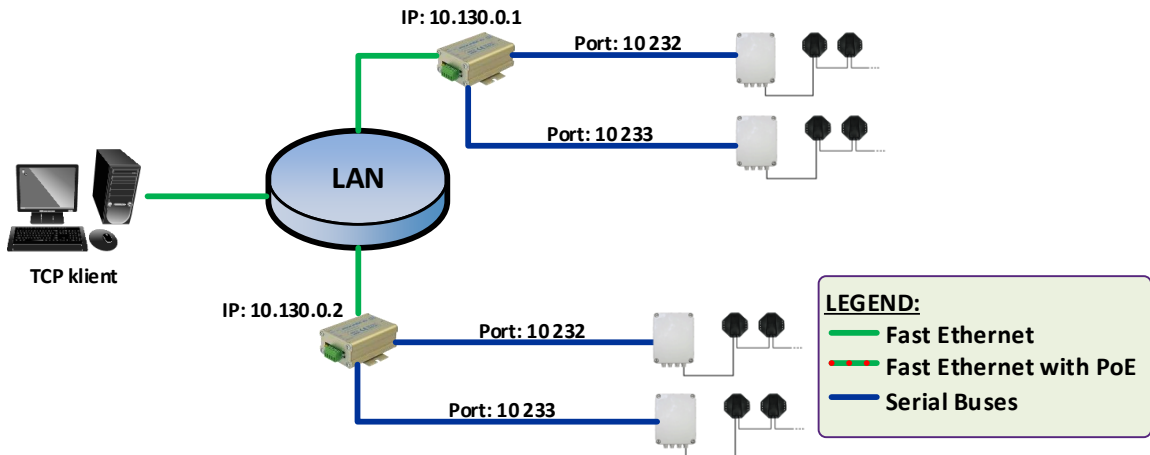
miniLAN-485 in TCP Client Mode (Initialization Connection)



miniLAN

Ethernet Converters Serial Lines

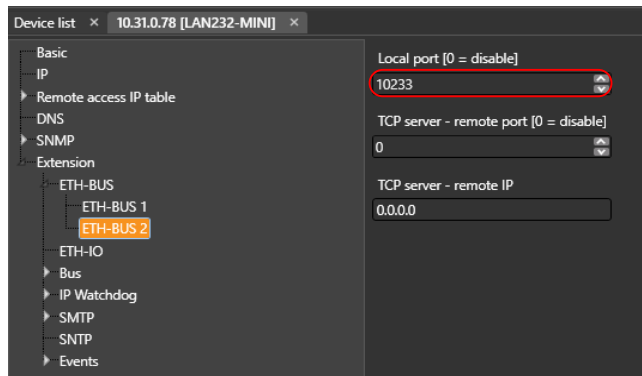
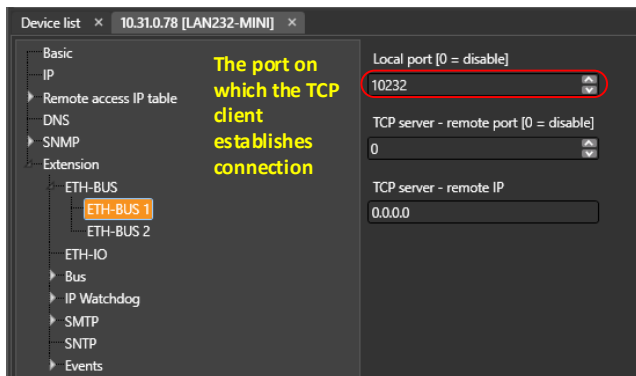
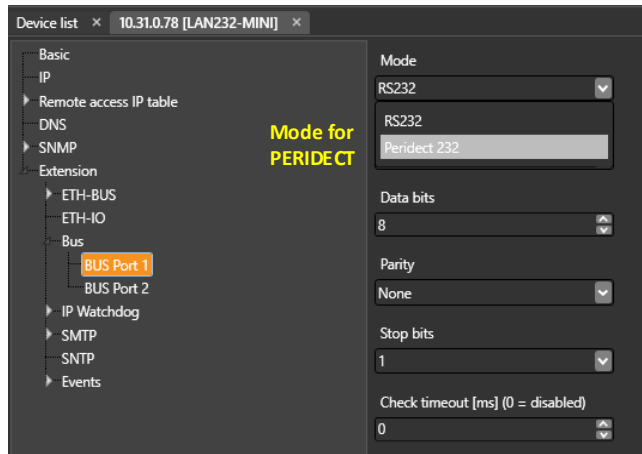
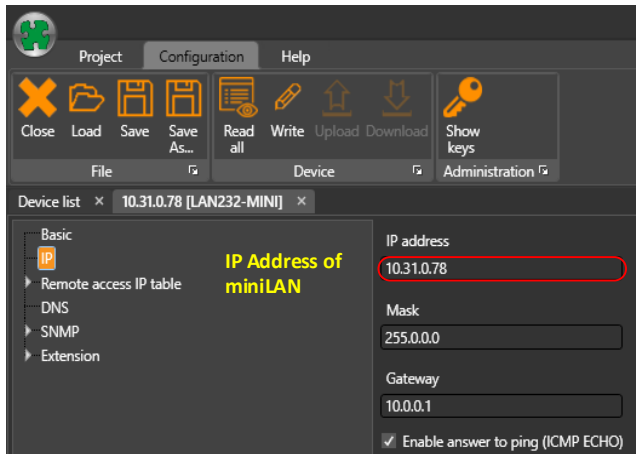
Example of Communication Over TCP for PERIDECT System



Setting of miniLAN-232 (Mode TCP Server)

The setting consists of the following steps:

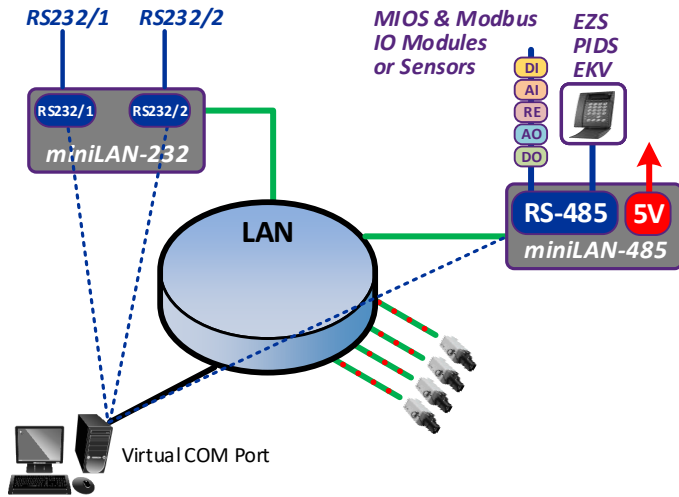
1. In menu „**Extension/Bus**“ set mode „**Peridect 232**“ for systems connected to Peridect or „**RS232**“ for connection to other devices communicating with this bus.
2. In menu „**Extension/ETH-Bus**“ set numbers of TCP ports that will be used by the TCP client to establish communication.
3. Configure the TCP client in a PC with installed application (e.g. integration software).



miniLAN

Ethernet Converters Serial Lines

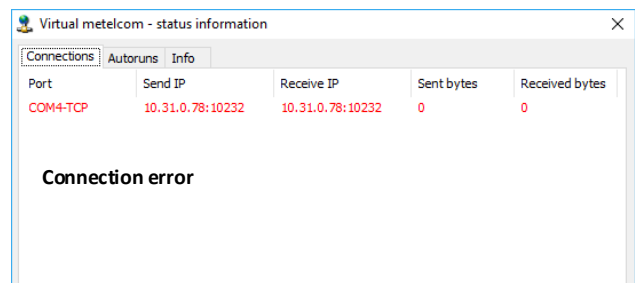
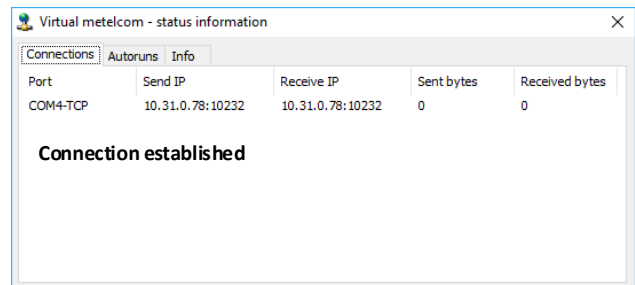
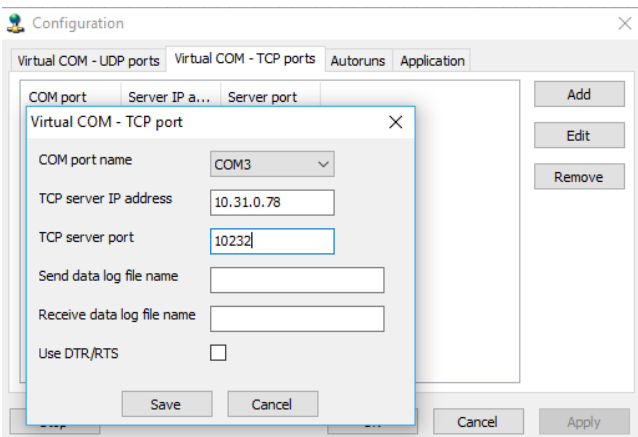
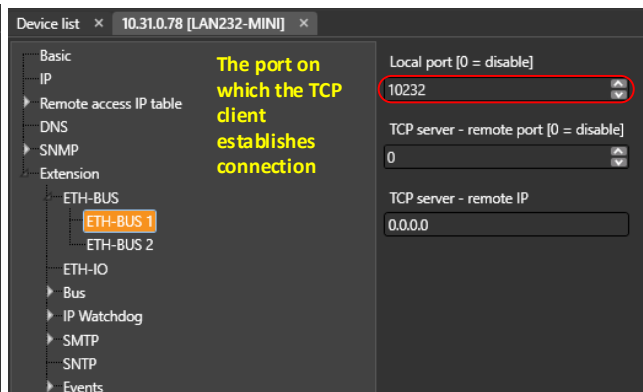
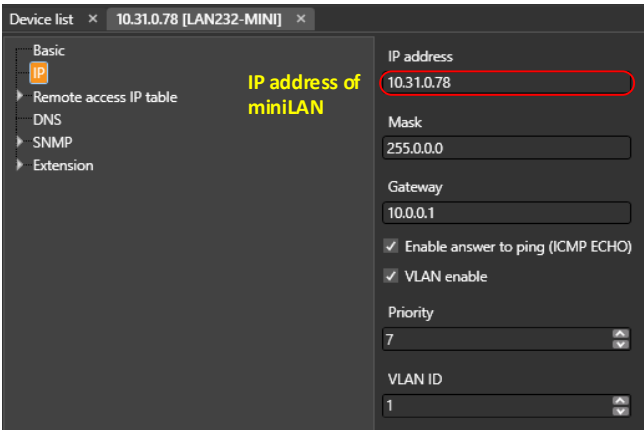
Example of Creating a Virtual COM Port



To set up miniLAN

The setting consists of the following steps:

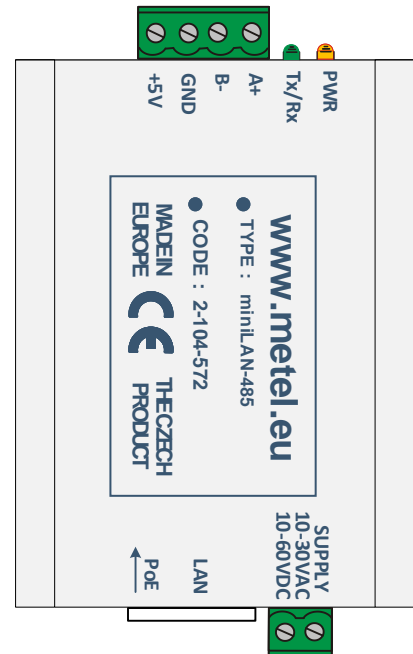
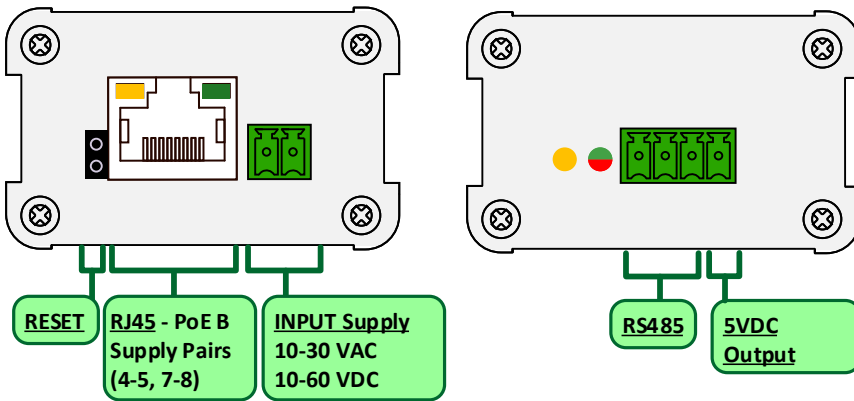
1. In the "Extension / ETH-BUS" menu, set the port number on which the TCP client establishes communication.
2. Install VComNet
3. In VComNet configuration mode, create a TCP or UDP connection



miniLAN

Ethernet Converters Serial Lines

Description miniLAN485



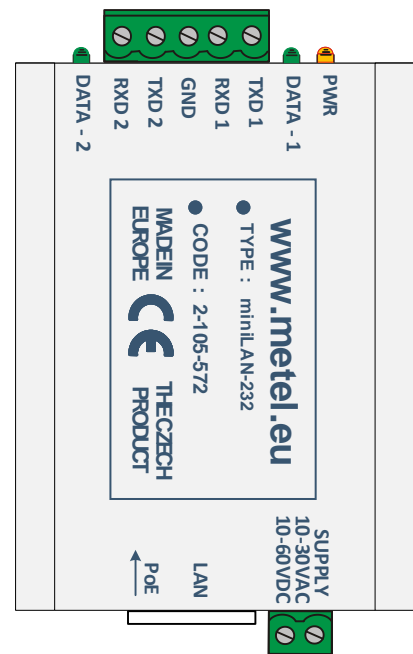
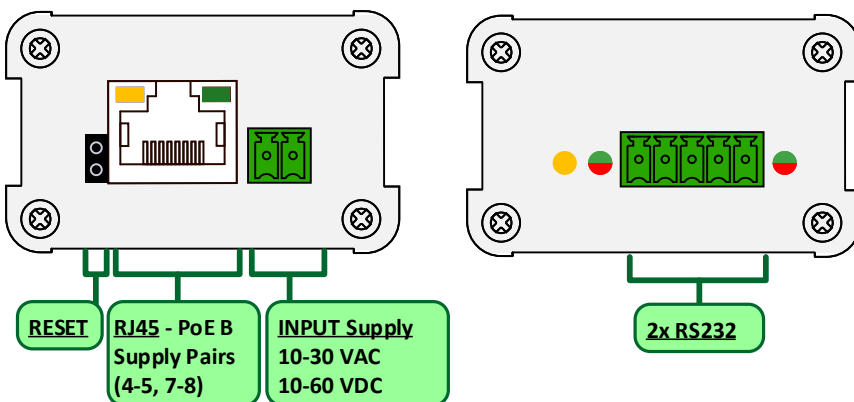
RESET - Reset device to factory settings. With the miniLAN powered on, connect the jumper. Leave the jumper (approx. 3-5 seconds) until the red LED Tx / Rx lights up. The red LED will remain on for about 5 seconds, then the device automatically restarts and factory settings are set.

Description LED function

Power: PWR lights = connected to power supply
 OFF = power off, power failure

RS485 bus: Tx/Rx red LED flashing = the RS485 port is sending data to the bus
 OFF = is not sending data
 lights 5s and after OFF = restart to factory default settings
 ON = activated bootloader
 green LED flashing = the RS485 port is receiving data on the bus

Description miniLAN232



RESET - Reset device to factory settings. With the miniLAN powered on, connect the jumper. Leave the jumper (approx. 3-5 seconds) until the red LED Tx / Rx lights up. The red LED will remain on for about 5 seconds, then the device automatically restarts and factory settings are set.

Description LED function

Power: PWR lights = connected to power supply
 OFF = power off, power failure

RS232 buses: DATA-1(2) red LED flashing = the RS232 port is sending data to the bus
 OFF = is not sending data
 lights 5s and after OFF = restart to factory default settings
 ON = activated bootloader
 green LED flashing = the RS232 port is receiving data on the bus