

CODE: INTRE-C v.1.0/III EN

TYPE: Interface RS485-ETHERNET







## Features:

- permission of Scientific and Research Centre for Fire Protection National Research Institute for use with power supplies of EN54C-LCD series
- cooperation with power supply units of EN54C-LCD and HPSG3-LCD series
- up to 247 devices served on a RS485 bus
- automatic detection of PSUs on the RS485 bus
- dynamic addressing of PSUs
- automatic email notifications of PSU malfunctions
- connection to ETHERNET network via the RJ45 connector
- compliance with IEEE 802.3 standard
- 10/100 Mb/s transmission speed
- full-duplex or half-duplex operation (auto-negotiation)
- galvanic isolation between ETHERNET interface and RS485
- 10÷30 V DC power
- cooperation with the PowerSecurity web application
- optical indication
- IP65 hermetic enclosure
- warranty: 3 years from production date

## **DESCRIPTION**

The RS485-ETHERNET interface is intended for cooperation with PSUs of the EN54C-LCD and HPSG3-LCD series. The PowerSecurity software enables remote monitoring of parameters through a cyclical preview of the current status of the power supply, reading the event log and diagrams of currents and voltages and performing remote battery test.

Interface is a device used to convert signals between RS485 bus and Ethernet network. For proper operation, unit requires an external power supply in range of 10÷30 V DC e.g. drawn from a PSU of EN54C series. Unit is mounted in a hermetic enclosure protecting against adverse environmental conditions.

Power supply	10 ÷ 30 V DC
Power consumption	max 0,8 W
RS485 transmission's speed	max 115200 bauds, with parity check
LAN transmission's speed	10/100 Mb/s (auto-negotiation)
Optical indication	PWR – supply voltage indication (red LED) LINK_ETH – Ethernet port connected (green LED) TX – data transmission (yellow LED) RX – receiving data (green LED)
Operating conditions	humidity -10°C ÷ +40°C relative humidity 20%90% no condensation
Dimensions (LxWxH)	121 x 81 x 60 [mm]
Net / gross weight	0,25 / 0,35 [kg]
Protection class	IP65
Storage temperature	-20°C+60°C
Other	Permission of Scientific and Research Centre for Fire Protection - National Research Institute for use with power supplies of EN54C-LCD series The interface in firmware version v1.2.3 and higher is compatible with power supplies of the HPSG3 series.



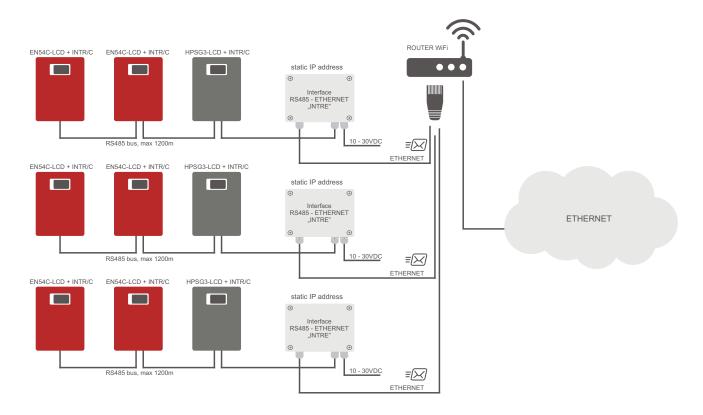








## Schematic diagram of Ethernet network communication



The network topology is based on an Ethernet switch (e.g. switch, router) to which subsequent segments of power supplies are connected (connected in the RS485 bus) via the RS485-Ethernet interface. Each interface has a static IP address. The communication between a PC and an end PSU is effected through entering of the IP address of the interface, the address of the PSU in the RS485 bus, and the number of the port in which the communication takes place. An interface may support a maximum of 247 PSUs on one RS485 bus.







