Raychem

ProtoNode-RER-1.5K / ProtoNode-RER-10K

Multi-Protocol Device Server Initial Setup Guide

chemelex

APPROVALS

BACnet Testing Labs (BTL) B-ASC
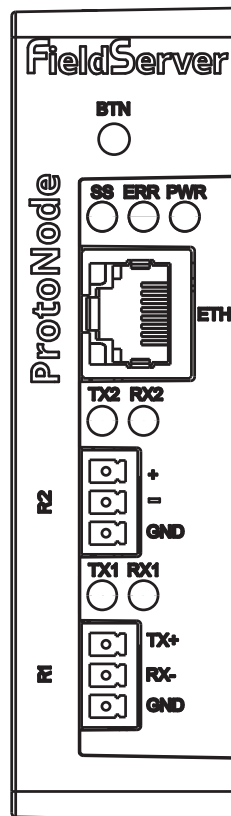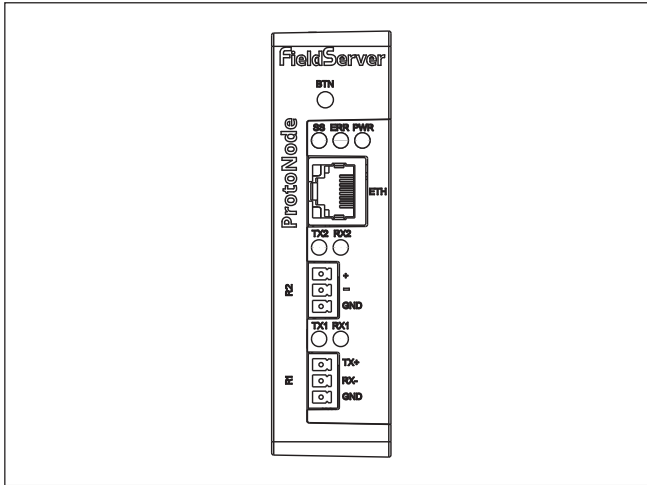
The Raychem ProtoNode-RER multi-protocol gateway is used to connect Raychem C910-485, TraceTek SIM, TraceTek TS-12 and ACS-30 Controllers to Building Management Systems (BMS) using BACnet or Metasys N2 protocol.

The ProtoNode-RER is pre-programmed with the Raychem Modbus registries for simple integration into your BMS. The Raychem ProtoNode-RER-1.5K is configured to communicate with up to 6 C910-485 controllers or an ACS-30 system up to 25 circuits or 255 TT-SIM modules or 6 TT-TS12s.
The Raychem ProtoNode-RER-10K is configured to communicate with an ACS-30 system up to 170 circuits.

For technical support call Chemelex at (800) 545-6258.

TOOLS REQUIRED

- Small flat-blade screwdriver

ADDITIONAL MATERIALS REQUIRED

- Wall fasteners for surface mounting (four fasteners)
- RS-485 cable (Belden # 8761, or Carol # C2514)
- 12–24 Vdc or 24 Vac power source
- Appropriate Raychem controller Installation Instructions

For detailed configuration information, including a complete start-up guide and mapping documents, please contact your local sales rep or Chemelex Technical Support. Global support contact information is listed at the end of this document.

ADDITIONAL INFORMATION

The ProtoNode-RER gateways are highly flexible and accommodate the most commonly used protocol. They come pre-programmed with the Modbus mapping of the C910, TT-TS12, TT-SIM and ACS-30 controllers.

The set-up involves 4 steps:

1. Connect RS-485 to Raychem controller (Figure B)
2. Connect power supply to ProtoNode (Figure A)
3. Configure the communications settings through ProtoNode's Web Interface Configuration Parameters Page (you can refer to the ProtoNode Startup Guide)
4. Connect to the Field or BMS system after the completing steps 1–3 (Figure B)

Once the gateway is connected and configured the Raychem Modbus registries will be visible to the system integrator through the field BMS.

Communication set-up requirements for C910, TTSIM, TT-TS12 and ACS-30 controllers:

- Protocol: Modbus-RTU (default for ACS-30)
- Baud rate: Auto or 9600
- Parity: None
- Modbus Address: 1
- Stop bits: 1 (TT-SIM, standalone), 2 (ACS, C910, TT-TS12)

⚠ WARNING:

FIRE AND SHOCK HAZARD: Do not mount the ProtoNode-RER in a hazardous location. Follow all local electrical safety procedures. Disconnect power before servicing or opening this unit. For technical support, call Chemelex at (800) 545-6258.

⚠ IMPORTANT:

The ProtoNode-RER is an electronic unit. During installation, take the following precautions to avoid damage to its electronic components:

- Handle with care to avoid mechanical damage.
- Keep electronics dry.
- Avoid exposure to static electricity.
- Avoid contamination with metal filings, liquids, or other foreign matter.

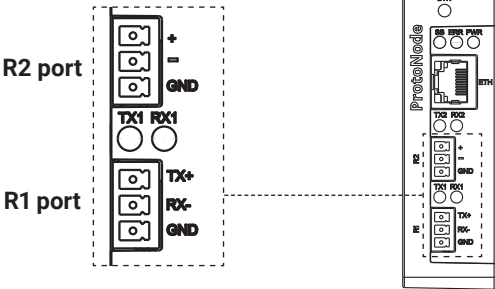## PROTONODE-RER LAYOUT, TERMINALS AND SWITCH POSITIONS

Left   **Front**   **Right**   **Back**   **Top**   **Bottom**
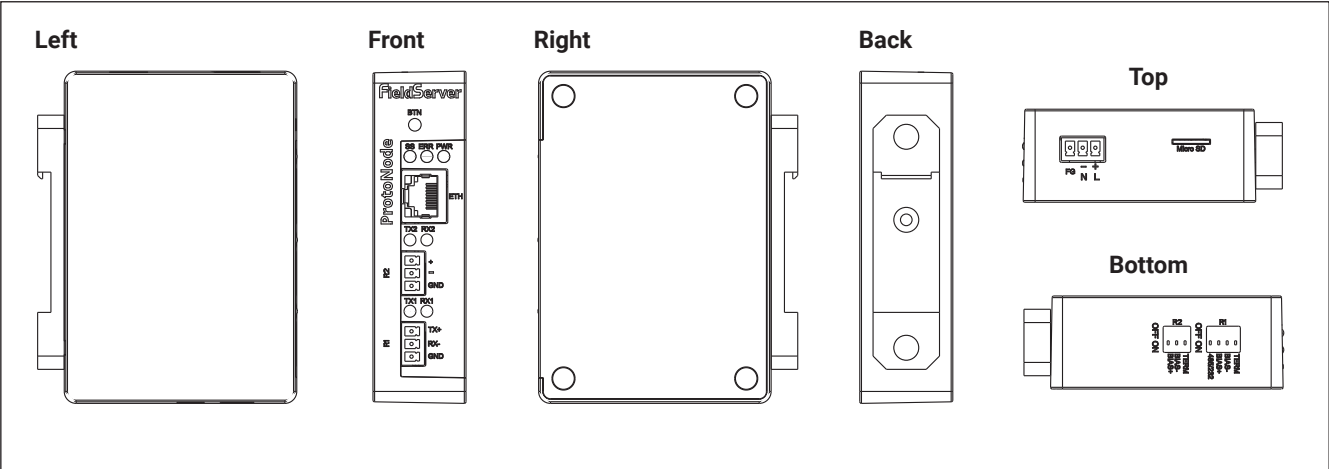
A. Power Supply Conections
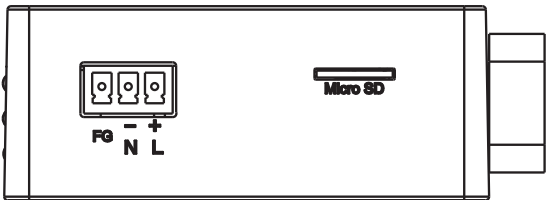
ProtoNode power supply: 12–24 Vdc or 24 Vac.
For details please go to: www.protocessor.com

B. RS-485 and BMS Connection

R1 port: RS-485 connection to Raychem controller.

R2 port: RS-485 connection to BACNet MS/TP or Metasys N2.

Ethernet port: BACNet IP connection.

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RAYCHEM-IM-H58622-ProtoNode-EN-2504

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