



## RTX LONWORKS® ROUTERS

The RTX Routers provides cost-effective, interoperable routing between LONWORKS® control networks. Two versions are available, the RTX-10 Power Line Router and the RTX-20 Twisted Pair Router. Both incorporate the Echelon RTR-10 router core module and are housed in an aluminium extrusion enclosure providing a rugged and aesthetically attractive housing that can be either panel or desk mounted.

### RTX-10 Power Line Router

The RTX-10 power line router provides connectivity between LONWORKS twisted pair and power line control networks. The router incorporates the PLT-22 Power Line Transceiver which, via the Echelon RTR-10 router core module, is connected to the Echelon FTT-10A Transceiver. The router is powered from the line voltage through the onboard universal switched mode power supply. Status LED's display the condition of power, packet detect, band-in-use and service indication (channel A and B). A line-to-neutral (differential mode) connection is made with the power line.

An additional port is available for the connection of a protocol analyser, directly to the power line side of the RTR-10 router core module. This allows all power line messages to be monitored, enabling full analysis of power line communications.

The router implements the CENELEC access protocol and complies with the CENELEC transmit output voltage and conducted interference requirements. This device can be installed as a repeater, bridge, configured or learning router. The RTX-10 router is configured by default as a repeater, when shipped.

### RTX-20 Twisted Pair Router

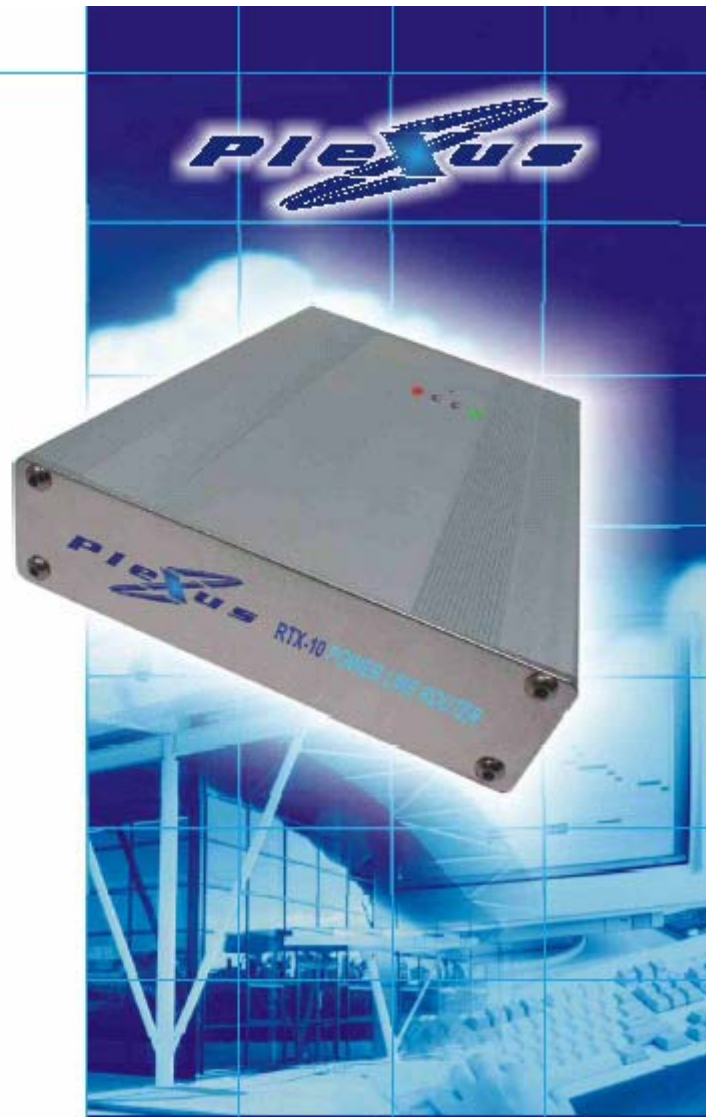
The RTX-20 router provides routing between two twisted pair free topology LONWORKS channels. The router enables management of network traffic and increases the number of LONWORKS devices and/or cable distances in the control network, within the LONWORKS guidelines. Status LED's display the condition of power, packet detect and service indication (channel A and B). The RTX-20 router is configured by default as a repeater, when shipped.

Both RTX routers can be installed as a repeater, bridge, configured or learning router.

A Configured / Learning Router is an intelligent router which uses routing tables to selectively forward messages based on the destination address.

A Repeater Router forwards all valid packets of data.

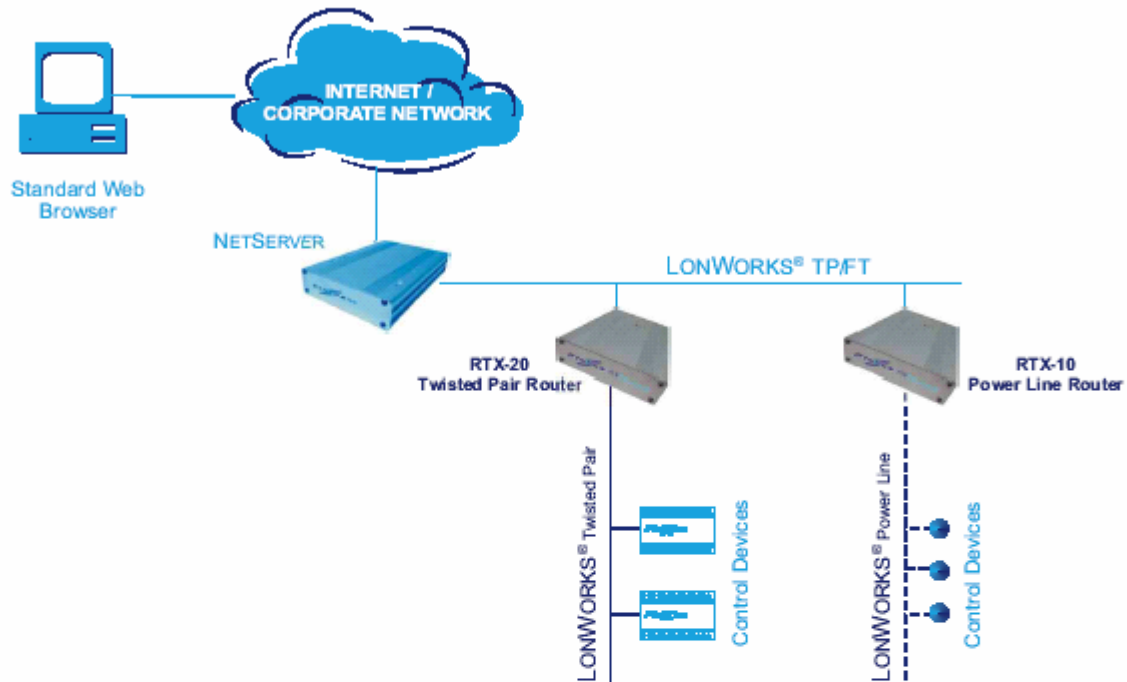
A Bridge forwards all packets that match its domains.



### Features

- RTX-10 Router for TP/FT to Power Line LONWORKS® Channels
- RTX-20 Router for TP/FT to TP/FT LONWORKS® Channels
- Protocol Analyser port (RTX-10 only)
- Incorporates Echelon Router Core Module (RTR-10)
- International power supply
- Operates from mains/line voltage
- Status LED's
- Panel or Desk mounted enclosure

## Network Architecture Incorporating RTX Routers



# Specification



### RTX-10/20 Routers

|                       |  |
|-----------------------|--|
| Processor             | ➤ 2 x Neuron 3150 10MHz (RTR-10 Router Core Module)                                  |
| Transceiver Types     | ➤ RTX-10: FTT-10A to PLT-22 (line-to-neutral coupling)<br>RTX-20: FTT-10A to FTT-10A |
| Service Pin Function  | ➤ Recessed service switch and LED  |
| Power Supply          | ➤ 85-265V AC @ 50/60Hz   |
| Status LED's          | ➤ Power, Packet detect, Band-in-use (RTX-10 only)                                    |
| Mounting              | ➤ Desk Mount (rubber feet included)<br>Panel Mount (L-Brackets optional extra)       |
| Dimensions            | ➤ H164 x W109 x D30mm  |
| Operating Temperature | ➤ 0° to +50°C  |
| EMI                   | ➤ CE / EN55022 / EN61000-4<br>CENELEC E50065-1 (RTX-10 only)                         |
| Factory Settings      | ➤ Routing Mode - Repeater<br>Transmission Mode PL-20C DCF, 7V p-p (RTX-10 only)      |