

## LPR Router Modules

### Models 42100R, 42101R, 42102R, 42103R, 42104R, and 42105R



### LonPoint® Modules

The LonPoint Modules are products designed to integrate new and legacy sensors and actuators, as well as LONMARK® devices, into cost-effective, interoperable, control systems for building and industrial applications. In contrast to traditional control networks, which use closed islands of control linked with proprietary gateways, the LonPoint Modules offer an open distributed system architecture in which every device performs some control processing and can be accessed from any location in the network. Distributing the processing throughout the network and providing open access to every device lowers the overall installation and life cycle costs, increases reliability by minimizing single points of failure, and provides the flexibility to adapt the system to a wide variety of applications.

The system consists of the LonPoint Interface, Scheduler, Data Logger, Router Modules, LonPoint Application Programs, LNS® based LonMaker® Integration Tool, LonPoint Plug-In and LNS DDE Server. The LPR Router Modules may be used with a LonPoint System or as part of any LONWORKS network.

### LPR-10 Modules

The LPR Modules are two-channel LONWORKS (ANSI/EIA-709.1) routers that can interface two different twisted pair channels (e.g., a high speed 1.25Mbps TP/XF-1250 backbone and a TP/FT-10 free topology channel), manage network traffic, increase the total number of LONWORKS devices, or increase the amount of cabling in a system.

**Six different models of LPR Routers are available:**

Name	Model	Channel Types
LPR-10	42100R	TP/FT-10 to TP/FT-10
LPR-11	42101R	TP/FT-10 to TP/XF-78
LPR-12	42102R	TP/FT-10 to TP/XF-1250
LPR-13	42103R	TP/XF-78 to TP/XF-78
LPR-14	42104R	TP/XF-78 to TP/XF-1250
LPR-15	42105R	TP/XF-1250 to TP/XF-1250

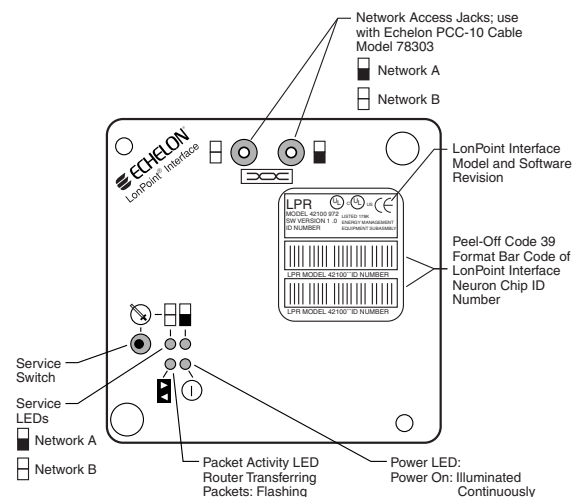
- ▼ Router for TP/FT-10, TP/XF-78, and TP/XF-1250 LONWORKS® (ANSI/CEA-709.1) channels
- ▼ Screw terminal wiring connections
- ▼ 16-30VAC or VDC operation
- ▼ Network access from front panel jacks
- ▼ Two-piece design cuts installation time, cost
- ▼ U.L. Listed, cU.L. Listed, CE Mark, FCC

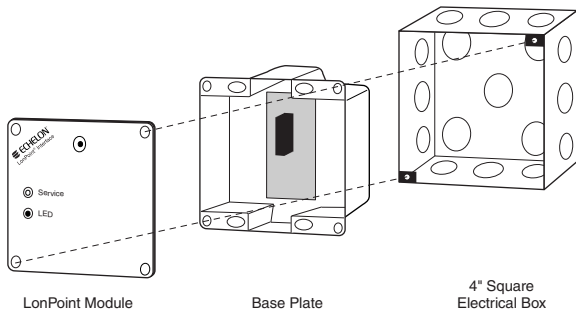
LPR Routers can be installed as repeaters, configured routers, or learning routers.

Models 42100R, 42101R, 42102R, 42103R, 42104R, and 42105R are compliant with the European Directive 2002/95/EC on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment.

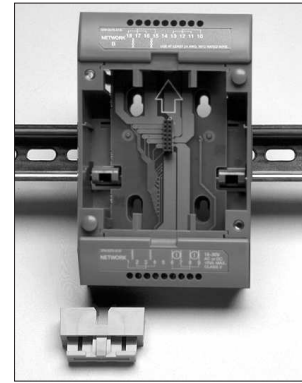
Using the LonMaker tool, the user configures and commissions the LPR Routers and other LonPoint modules, as well as third-party LONMARK and LONWORKS devices, to create an interoperable, distributed control system. Network design and configuration is simplified by the Visio® interface of the LonMaker tool, which can both import and export AutoCAD® files and generate as-built documentation.

A unique, two-piece design allows pre-wiring and cable testing by an electrician prior to installation of the electronics; technician time can be reserved for tasks such as node configuration. Power and network wiring are “looped” through the base plate, providing the ability to replace modules by hot-plugging without disrupting the operation of the two network channels.





*LonPoint Interface Module 4" Square by 2" Deep Electrical Box  
Mounting Configuration*



*Type 2D DIN Base Plate Front View*

Polarity-insensitive power and network connections minimize the chance of miswiring. Two front panel jacks access the two twisted pair networks without any disassembly, saving time when the network must be accessed for configuration or maintenance. A front panel bar code with the model, revision, and two removable Neuron® Chip ID stickers is provided. When placed on the building or system design plans, these stickers can save installation time, especially for inaccessible nodes.

## Mounting

The LPR modules may be used with either a Type 2 Base Plate (for use with 4" square electrical boxes) or a Type 2D DIN Base Plate (for wall, panel, or 35mm DIN-rail mounting).

## Specifications

Function	Description
Processor	Two Neuron 3150® Chips, 10MHz
Service function	Recessed service switch, service (wink) LED. Dual tear-off bar-code Neuron ID self-adhesive tag
Transceiver type	Varies by model
Input power	16-30VAC or DC @ 2VA, internally isolated power supply
Mounting	Type 2 or Type 2D DIN Base Plate
Temperature	-40 to +85°C, operating and non-operating
Humidity	10 to 95% RH @ 50°C
EMI	FCC A, CE Mark
Safety agency	U.L. 916
Dimensions	3.9" x 3.9" x 1.0" (10cm x 10cm x 2.5cm)

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