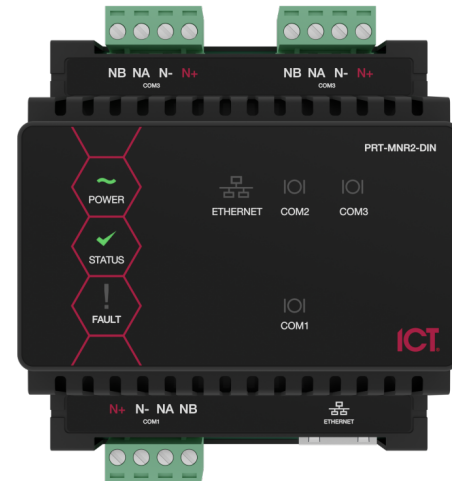


## Protege Module Network Repeater



The Protege Module Network Repeater is designed to extend the network capabilities of the Protege system, allowing network access where distance or physical structures may make cabling difficult.

The network repeater is added to the system via RS-485 or ethernet and provides optical isolation between up to three branches of the module network.

### Feature Highlights

- > 3 isolated RS-485 connections
- > Secure encrypted RS-485 module communications
- > Internal industry standard 10/100 ethernet connection
- > RS-485 or ethernet network expansion
- > Configurable RS-485 biasing
- > Designed for use with industry standard DIN rail mounting

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## Network Expansion

The network repeater provides the ideal solution for:

- > Module networks that run between two buildings.
- > Resolving network connectivity / communication issues caused by ground loops or long distance runs.
- > Extending the LAN using ethernet to remove the need to run expensive cabling over long networks.
- > Extending the RS-485 module network.
- > Creating isolated RS-485 networks for keypads or devices located outside or in publicly accessible areas.
- > Locations where physical wiring is difficult.
- > Replacing existing systems that use spur wiring.

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## Web Interface

The built-in web interface enables you to configure and manage the network repeater's settings, monitor the status of the network repeater, and view version information.

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## Power over Ethernet (PoE)

PoE models simplify installation and reduce costs. As PoE runs data and power together over the same cable it eliminates the time and overhead associated with AC outlet installations, while providing flexibility of the install location.

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## Configurable RS-485 Biasing

RS-485 biasing on the COM ports enables setting master or slave configuration for each port. This helps to ensure more reliable communication between the network repeater and the connected modules.

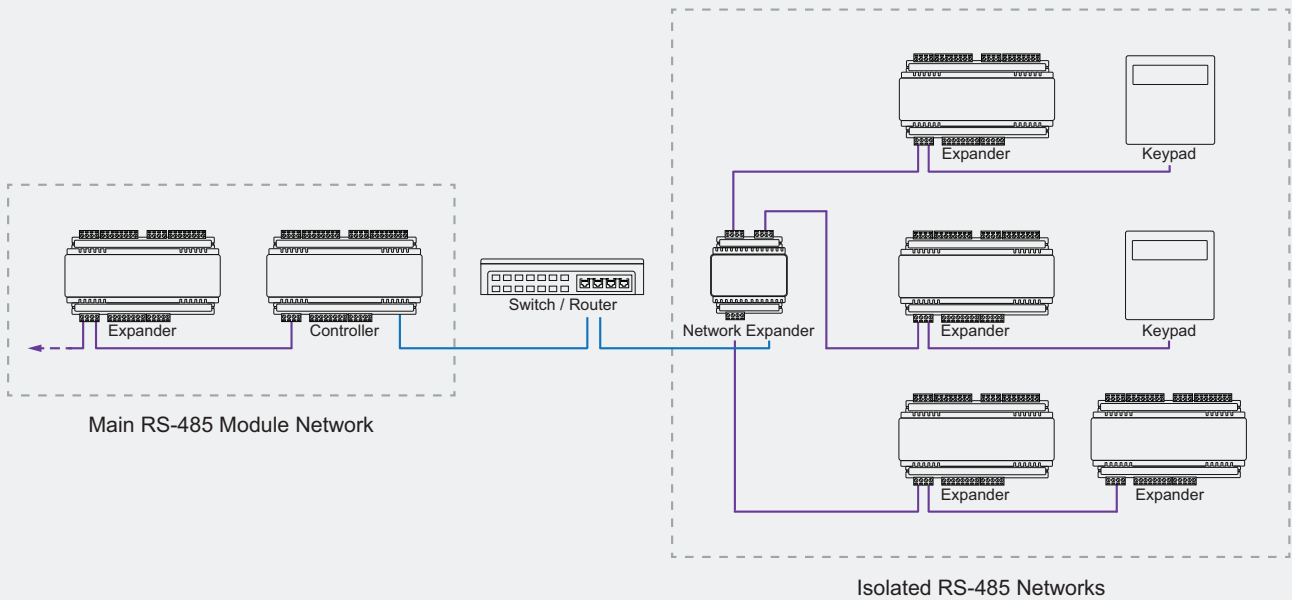
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## Isolated RS-485 Network Spurs

The RS-485 ports can be used to extend the network into up to three optically isolated branches. The isolated communications interface offers full galvanic isolation to prevent ground loop noise and cross-phase ground differential between network devices. This enables the creation of isolated RS-485 networks for keypads or devices that are located outside or in publicly accessible areas, or for replacing existing systems using spur wiring.

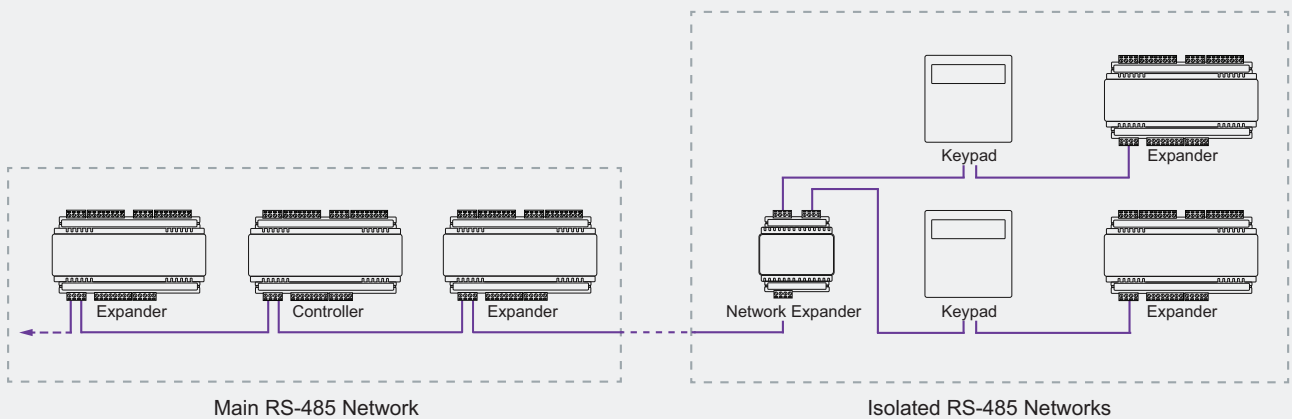
## Ethernet Expansion

The ethernet solution allows the network repeater to communicate via UDP through a switch or router. You can connect the network repeater via ethernet to link module networks running between two buildings (within close proximity), removing the need to run expensive cabling over long networks, and to enable the network to reach physical locations where traditional wiring is difficult.



## RS-485 Expansion

With RS-485 you can insert the network repeater anywhere within the LAN to strengthen communications, resolve network issues or extend the RS-485 network beyond the 900m (3000ft) limit.



## Technical Specifications

| Ordering Information   |   |
|------------------------|---|
| PRT-MNR2-DIN           | Protege Module Network Repeater   |
| Power Supply           |   |
| Operating Voltage      | 12V DC  |
| Operating Current      | 65mA (Typical)  |
| Communication          |   |
| RS-485                 | 3 isolated RS-485 communication interface ports   |
| Ethernet               | 110/100Mbps Ethernet Communication Link   |
| Ports                  | Port 80 TCP/IP HTTP (Controller Web Interface) Fixed<br>Port 9450 UDP/IP (Network Repeater to Controller) |
| Dimensions             |   |
| Dimensions (L x W x H) | 78 x 90 x 60mm (3.07 x 3.54 x 2.36")  |
| Net Weight             | 150g (5.3oz)  |
| Gross Weight           | 220g (7.8oz)  |
| Operating Conditions   |   |
| Operating Temperature  | -10° to 55°C (14° to 131°F)   |
| Storage Temperature    | -10° to 85°C (14° to 185°F)   |
| Humidity               | 0%-93% non-condensing, indoor use only (relative humidity)  |

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## Regulatory Notices

### **RCM (Australian Communications and Media Authority (ACMA))**

This equipment carries the RCM label and complies with EMC and radio communications regulations of the Australian Communications and Media Authority (ACMA) governing the Australian and New Zealand (AS/NZS) communities.

### **AS/NZS 2201.1 Class 5**

Protege systems conform to AS/NZS 2201.1:2007 Class 5 intruder alarm systems standards for the construction, operation, performance and installation of intruder alarm equipment and systems installed in clients' premises.

### **CE - Compliance with European Union (EU)**

Conforms where applicable to European Union (EU) Low Voltage Directive (LVD) 2014/35/EU, Electromagnetic Compatibility (EMC) Directive 2014/30/EU, Radio Equipment Directive (RED) 2014/53/EU and RoHS Recast (RoHS2) Directive: 2011/65/EU + Amendment Directive (EU) 2015/863.

This equipment complies with the rules of the Official Journal of the European Union, for governing the Self Declaration of the CE Marking for the European Union as specified in the above directives.

Security Grade 4, Environmental Class II, EN 50131-1:2006+A2:2017, EN 50131-3:2009, EN 50131-6:2008+A1:2014, EN 50131-10:2014, EN 50136-1:2012, EN 50136-2:2013, EN 60839-11-1:2013, Power frequency magnetic field immunity tests EN 61000-4-8, Readers Environmental Class: IVA, IK07.

### **UK Conformity Assessment (UKCA) Mark**

This equipment carries the UKCA label and complies with all applicable standards.

### **Industry Canada**

ICES-003

This is a Class A digital device that meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (A)/NMB-3(A)

### **Federal Communications Commission (FCC)**

FCC Rules and Regulations CFR 47, Part 15, Class A.

This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference; (2) This device must accept any interference received, including interference that may cause undesired operation.

> For a full regulatory and approval list please visit the ICT website.

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16-Jun-22