



Protege DIN Rail 16 Input Expander

The Protege DIN Rail 16 Input Expander provides the interface of up to 16 inputs for monitoring and automation in the Protege system.

With 16 inputs that can be used for extended monitoring functionality, the DIN Rail 16 Input Expander provides extensive hardware advancements that allow flexible input programming and configuration, and is designed for use with industry standard DIN Rail mounting.

Feature Highlights

- > Connect any combination of normally closed or normally open inputs, configurable per input
- > 16 monitored inputs
- > Utilizes analog to digital processing with 5x over sampling
- > 4 state input alarm using resistors to provide short, alarm, closed and tamper conditions
- > High performance 32 Bit processor
- > Secure encrypted RS-485 module communications
- > Online and remote upgradable firmware
- > Designed for use with industry standard DIN Rail mounting

Connectivity and System Expansion

Expanding the Protege system with local input and output from the Input Expander allows convenient cost effective expansion and the added benefits of:

- > 16 inputs can be assigned to any 4 areas in the system each being processed using different options or features
- > Address configuration of the Input Expander is achieved using the address programming feature of the Protege System Controller

Communication

A single RS-485 communication interface port used for all network communication functions and interconnection to other modules.

Power Supply

Device power is supplied from a 12VDC input. Ultra low current requirements ensure cost effective power distribution.

Upgradable Firmware

Utilizing the latest flash technology and high performance communication mediums, the firmware can be updated via the Protege interface.

Technical Specifications

| Ordering Information | |
|---|--|
| PRT-ZX16-DIN | Protege DIN Rail 16 Input Expander |
| Power Supply | |
| DC Input Voltage | 11-14VDC |
| DC Output Voltage (DC IN Pass-Through) | 10.83-14.0VDC 0.7A (Typical) Electronic Shutdown at 1.1A |
| Operating Current | 80mA (Typical) |
| Total Combined Current* | 3A (Max) |
| Low Voltage Cutout | 8.7VDC |
| Low Voltage Restore | 10.5VDC |
| Communication | |
| RS-485 | Isolated Module Network |
| Inputs | |
| Inputs | 16 High Security Monitored Inputs (10ms to 1hr Input Speed Programmable) |
| Trouble Inputs | 16 |
| Dimensions | |
| Dimensions (L x W x H) | 156.8 x 90 x 60mm (6.17 x 3.54 x 2.36") |
| Weight | 264g (9.31oz) |
| Operating Conditions | |
| Operating Temperature | UL/ULC 0° to 49°C (32° to 120°F) : EU EN -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) |
| Mean Time Between Failures (MTBF) | 784,316 hours (calculated using RFD 2000 (UTE C 80-810) Standard) |

* The Total Combined Current refers to the current that will be drawn from the external power supply to supply the expander and any devices connected to its outputs. The Auxiliary outputs are directly connected via thermal resettable fuses to the N+ N- input terminals, and the maximum current is governed by the trip level of these fuses.

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.

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.

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.

Industry Canada

ICES-003

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

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

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

New Zealand

4 John Glenn Ave
Rosedale
Auckland 0632
Email: sales@ict.co
Toll free: (0800) 428 111
Ph: +64 9 476 7124

USA

5265 S Rio Grande Street
Suite 201
Littleton, CO 80120
Email: ussales@ict.co
Toll free: (855) 428 911
Ph: +1 720 442 0767

Canada

6201 Highway 7
Unit 7
Vaughan, Ontario, L4H 0K
Email: cansales@ict.co
Ph: +1 647 724 3428

Australia

Building 4
39-43 Duerdin Street
Notting Hill, VIC 3168
Email: ausales@ict.co
Ph: +61 426 145 907

EMEA

Email: emeasales@ict.co
Ph: +44 1625 800078

Designers & manufacturers of integrated electronic access control, security and automation products.

Designed & manufactured by Integrated Control Technology Ltd.

Copyright © Integrated Control Technology Limited 2003-2020. All rights reserved.

Disclaimer: Whilst every effort has been made to ensure accuracy in the representation of this product, neither Integrated Control Technology Ltd nor its employees shall be liable under any circumstances to any party in respect of decisions or actions they may make as a result of using this information. In accordance with the ICT policy of enhanced development, design and specifications are subject to change without notice.