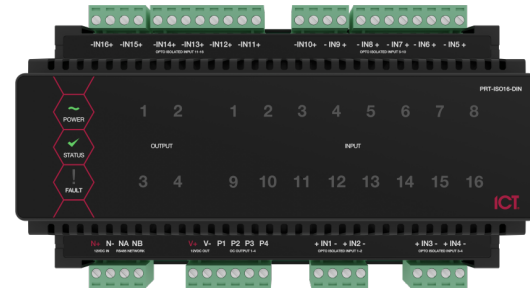




Protege DIN Rail 16 Input Opto-Isolated Expander



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

With 16 inputs, each completely isolated electrically from the others, the isolated input expander allows flexible input programming and configuration, enabling monitoring of a wide range of open contact sensors for security, elevator control and building automation.

Feature Highlights

- > 16 opto-isolated inputs, each input completely isolated electrically from the others
- > Utilizes analog to digital processing with 5x oversampling
- > 4 low current (50mA) outputs for driving any signaling device
- > Each isolated input expander can monitor up to 16 trouble inputs
- > Secure encrypted RS-485 module communications
- > High performance 32 Bit processor
- > Online and remote upgradable firmware
- > Designed for use with industry standard DIN rail mounting

Connectivity and System Expansion

Expanding the Protege system with local inputs and outputs from the DIN Rail 16 Input Opto-Isolated Expander allows convenient, cost-effective expansion with the following additional benefits:

- > 16 opto-isolated inputs capable of a large voltage range, ideal for use in elevator control or building automation
- > 4 multi-function outputs for use in any output programming, ideal for connection in an electrical switch room to control signage, lighting, building automation or system indicators
- > Address configuration of the isolated input expander is achieved using the address programming feature of the Protege system controller

LED Indicators

The isolated input expander features comprehensive diagnostic indicators that can aid in diagnosing faults and conditions.

LED indicators on the isolated input expander include:

- > Status indicator
- > Fault indicator
- > Power indicator
- > Output indicators
- > Input status indicators

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.

Wall Mountable

The additional wall mounting feature provides absolute convenience and flexibility in module positioning.

Technical Specifications

Ordering Information	
PRT-ISO16-DIN	Protege DIN Rail 16 Input Opto-Isolated Expander
Power Supply	
DC Input Voltage	11-14V DC
DC Output Voltage (DC IN Pass-Through)	10.45-13.85VDC 0.7A (Typical) Electronic Shutdown at 1.1A
Operating Current	80mA (Typical)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Isolated Module Network
Inputs	
Operating Voltage	10V to 250V (DC/AC RMS) 35-75Hz
Input Type	16 Galvanic Isolated (10ms to 1hr Input Speed Programmable)
Input Current Draw	Current 3mA per input @ 220VDC
Outputs	
Outputs	4 (50mA Max) Open Collector
Dimensions	
Dimensions (L x W x H)	156.8 x 90 x 60mm (6.17 x 3.54 x 2.36")
Net Weight	289g (10.2oz)
Gross Weight	390g (13.8oz)
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)
Mean Time Between Failures (MTBF)	784,316 hours (calculated using RFD 2000 (UTE C 80-810) Standard)

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.

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.

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

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

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

Designers & manufacturers of integrated electronic access control, security and automation products.
Designed & manufactured by Integrated Control Technology Ltd.
Copyright © Integrated Control Technology Limited 2003-2022. 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.

www.ict.co

16-Jun-22