



Protege Half DIN Rail 8 Output Expander



The Protege Half DIN Rail 8 Output Expander extends the Protege integrated access control, security and building automation system with an additional 8 outputs for automation.

Featuring high current Form C relays, the output expander provides extensive hardware advancements that allow flexible and structured control of building systems including lighting and HVAC.

Feature Highlights

- > High performance 32 Bit processor
- > 8 Form C relays capable of switching resistive loads up to 5 amps
- > Secure encrypted RS-485 module communications
- > Online and remote upgradable firmware utilizing the latest flash technology
- > Ideal for connection in an electrical switch room to control signage, lighting and building automation
- > LED indicators display the state of all onboard relays
- > Each output expander can monitor up to 8 trouble inputs
- > Designed for use with industry standard DIN rail mounting

Connectivity and System Expansion

Expanding the Protege system with outputs from the output expander allows convenient, cost-effective system expansion with the following additional benefits:

- > 8 multiple-function outputs available for use in any programmable output configuration
- > Address configuration of the output expander is achieved using the address programming feature of the Protege system controller
- > Outputs can be configured to automatically turn on or resume their previous state upon restoration of power or communication failure

Power Supply

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

Smaller Footprint

The compact two-tier half DIN rail module design occupies less valuable real estate to provide more control in less space.

Wall Mountable

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

Communication

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

Outputs

The output expander has 8 programmable Form C relay outputs which can be used to activate bell sirens, lighting circuits, door locks, relay accessory products and other automation points.

LED Indicators

The output expander features comprehensive diagnostic indicators that can aid in diagnosing faults and conditions. LED indicators on the output expander include:

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

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-HPX8-DIN	Protege Half DIN Rail 8 Output 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 (Normal Standby)
Total Combined Current*	3.25A (Max)
Low Voltage Cutout	8.7VDC
Low Voltage Restore	10.5VDC
Communication	
RS-485	Module Network
Outputs	
Programmable Outputs	8 Form C relays - 7A N.O/N.C. at 30 VAC/DC resistive/inductive
Dimensions	
Dimensions (L x W x H)	78 x 90 x 60mm (3.07 x 3.54 x 2.36")
Net Weight	240g (8.5oz)
Gross Weight	300g (10.6oz)
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)	587,177 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.

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.

UL/ULC (Underwriters Laboratories)

- > UL1610 for Central-Station Burglar-Alarm Units
- > UL294 for Access Control System Units
- > CAN/ULC S304 for Signal Receiving Centre and Premise Burglar Alarm Control Units
- > CAN/ULC S319 for Electronic Access Control Systems
- > CAN/ULC S559 for Fire Signal Receiving Centres and Systems

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.

Designers & manufacturers of integrated electronic access control, security and automation products.
Designed & manufactured by Integrated Control Technology Ltd.
Copyright © Integrated Control Technology Limited 2003-2021. 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

07-Sep-21