

## Protege Single Input Expander

The Protege Single Input Expander provides the interface of an additional input for monitoring and automation in the Protege integrated access control, security and building automation system.

With an input which can be used for extended monitoring functionality, the Single Input Expander provides extensive hardware advancements that allow flexible input programming and configuration.

### Feature Highlights

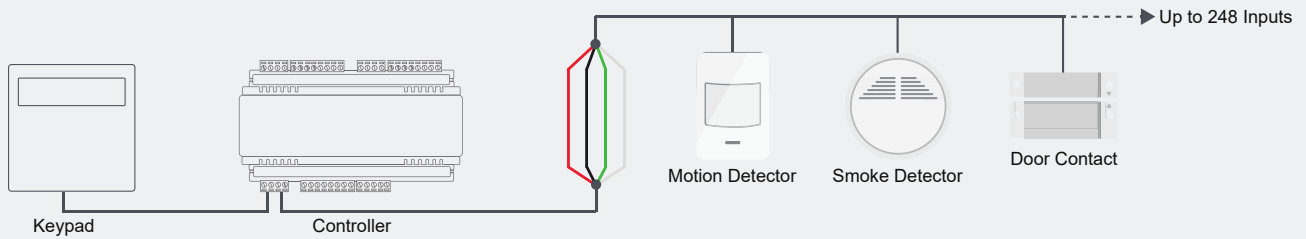
- > High performance 32 Bit processor
- > 1 monitored input
- > Connects directly to the RS-485 module network utilizing secure encrypted RS-485 module communications
- > Four-state input alarm using resistors to provide short, alarm, closed and tamper conditions
- > Utilizes analog to digital processing with 5x over sampling
- > Ideal for sites with long cable runs and complex wiring routes
- > Reduces labor costs for cabling during an upgrade
- > Enables the simple upgrade of older systems where detectors are connected in a four-wire bus
- > Supports a normally closed or normally open input
- > Online and remote upgradable firmware utilizing the latest flash technology

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## 4-Wire Bus Configuration

The Single Input Expander is designed to allow the simple upgrade of systems where motion detectors, smoke detectors and other dry contact input devices have been deployed using a four-wire bus topology. Using the RS-485 module network, the Single Input Expander is ideal for larger sites where long cable runs and complex wiring routes are present.

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## Connectivity and System Expansion

Expanding the Protege system with local inputs and outputs allows convenient, cost-effective expansion with the following additional benefits:

- > An input 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

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## Monitoring

Allows monitoring of a wide range of EOL capable or open contact sensors for security and building automation purposes.

## Communication

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

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## Power Supply

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

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## 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-ZX1	Protege Single Input Expander
Power Supply	
Operating Voltage	11 - 14VDC
Operating Current	20mA (Typical)
Communication	
RS-485	Isolated Module Network
Inputs	
Inputs	1
Dimensions	
Dimensions (L x W x H)	7 x 18 x 20mm (0.28 x 0.71 x 0.79")
Net Weight	Approx. 1g (0.04oz)
Gross Weight	Variable packed qty.
Operating Conditions	
Operating Temperature	-10° to 55°C (14° to 131°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)

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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.

### **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.  
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16-Jun-22