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TS0870 Series
Smart Card Readers

Overview

The TS0870 series of Smart Card Readers provide secure authentication of users to the Challenger system for intrusion detection and access control.

Unprogrammed smart cards can be used in the default unsecured mode in an IUM Challenger system. In secured mode, a Smart Card Programmer and a special password protects against unauthorised use. Secured mode provides over 268 million combinations of passwords (4 billion passwords if the special high-security option for the Smart Card Programmer is used).

Challenger Smart Card Readers can be connected directly to the Challenger panel via the RS-485 LAN for simple door control, or via an Intelligent Access Controller for comprehensive access control functionality.

Challenger Smart Card Readers can be used to operate devices such as photocopiers, drinks dispensers, or lighting, in exchange for programmable user credits.
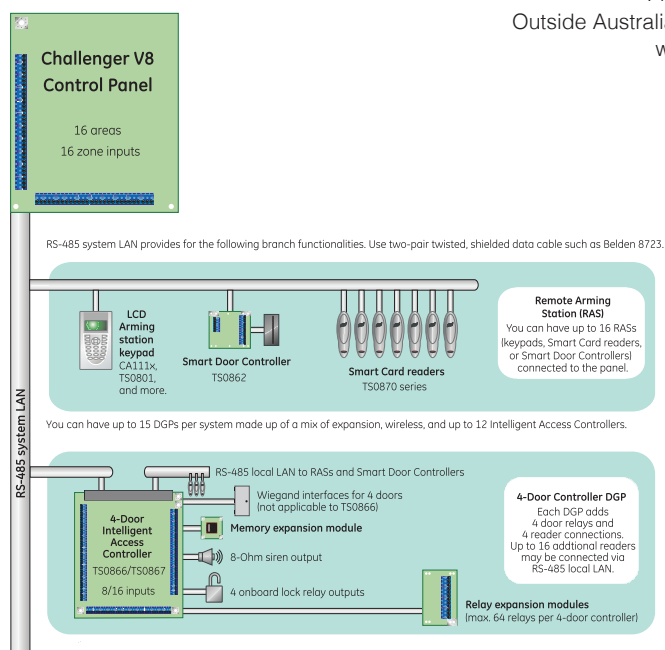
Features

- Indoor and heavy duty models available

- Program LEDs for different functions

- High security 4-byte security code and read/write encryption

- Pay-per-use application

- Can accommodate up to 11,466 site codes and up to 65,535 user numbers

- Can be used to automatically arm and disarm areas, as well as to unlock doors

- Can be used as a Wiegand reader when connected to a Wiegand or magnetic stripe interface

- Built-in optical tamper switch

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System Block Diagram

Challenger V8 Control Panel

16 areas
16 zone inputs

RS-485 system LAN provides for the following branch functionalities. Use two-pair twisted, shielded data cable such as Belden 8723.

LCD Arming station keypad CA111x, TS0801, and more.

Smart Door Controller TS0862

Smart Card readers TS0870 series

Remote Arming Station (RAS) You can have up to 16 RASs (keypads, Smart Card readers, or Smart Door Controllers) connected to the panel.

RS-485 system LAN

You can have up to 15 DGPs per system made up of a mix of expansion, wireless, and up to 12 Intelligent Access Controllers.

RS-485 local LAN to RASs and Smart Door Controllers

Wiegand interfaces for 4 doors (not applicable to TS0866)

4-Door Intelligent Access Controller TS0866/TS0867

8/16 inputs

Memory expansion module

8-Ohm siren output

4 onboard lock relay outputs

4-Door Controller DGP Each DGP adds 4 door relays and 4 reader connections. Up to 16 addtional readers may be connected via RS-485 local LAN.

Relay expansion modules (max. 64 relays per 4-door controller)

Specifications

Electrical	
Supply Voltage	9 to 14 DC
Current consumption	25mA in standby; 80 mA during card read
Open collector output	1 (50 mA @ 14 VDC)
Features	
Addressing	The address of a new reader on the LAN may be configured from an LCD keypad or by using a reader configuration card
Request-to-exit input	Yes
Physical	
Maximum cabling distance	1,500 m (unless extended by LAN Isolation Interfaces)
Colour	TS0870: cream; TS0870H: Dark grey; TS0870D: 4 colours available
Dimensions with cover (W x H x D)	TS0870 — 36 x 110 x 20 mm TS0870H — 42 x 150 x 16 mm TS0870D — 74 x 115 x 13 mm
Environmental	
Operating temperature	-35 to 66^{0}C
IP Rating	IP54
Max. humidity	95% non-condensing
Regulatory Compliance	ACMA C-Tick for Australia and New Zealand

Ordering information

ATS1481	Reader Configuration Card
TS1173	Smart Fob
TS1174	Smart Card with additional magnetic stripe functionality
TS1175	Smart Card, clam shell style, low cost
TS0870P	Smart Card Programmer
TS0870	Smart Card Proximity Reader.*
TS0870D	Smart Card Proximity Reader - Deco Plate.*
TS0870H	Smart Card Proximity Reader for industrial situations
TS0870W	Wall Box Mounting Kit

* TS0870 and TS0870D are sold in standard cream colour.

To order spare cover add "-CO" and colour: CRM = Cream,
DSND = Desert Sand
GRY = Grey
SND = Sand
(for example, order "TS0870-COCRM" for a TS0870 with a cream dress cover).

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