

tSec Extra Reader

The tSec Extra Reader provides a complete multitechnology smart card RFID solution. Compatible with all Wiegand capable control systems and incorporating RS-485 communication, tSec Readers allow rapid deployment of secure technology in any environment. Available in multiple card capabilities (13.56MHz, 125kHz and/or **Bluetooth**[®] wireless technology), with an optional keypad, and in a choice of black or white, you can select the model to fit your needs and your decor.

Feature Highlights

 Multi card technology provides support for DESFire, MIFARE, and 125kHz cards from a single reader

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- Encrypted RS-485 or standard
 Wiegand connection
- > Optional Bluetooth® / NFC credential reading
- Supports OSDP communication protocol with secure channel
- Read range up to 60mm (2.36") with proximity ISO cards
- > Configurable LED strip: 2 color control (blue and green) via external LED wiring, 16 color selectable for Protege function codes (RS-485 connection only)
- Fully encapsulated design with environmental IP Rating of IP65 for outdoor and indoor operation
- Standard wall plate size suitable for replacing existing fittings
- Optional accessories expand the range of installation possibilities

Optional Features

A range of optional features means there is a model to suit everyone.

- > Available with or without capacitive touch keypad
- > Choose from the 125kHz or MIFARE/DESFire models, or the Multi Technology model that supports all formats
- Optional Bluetooth® / NFC connectivity to allow access via a smartphone
- > Optional vandal resistant cover
- > Opt for either black or white according to your decor

Multi Card Technology

Available with 13.56MHz smart card capability or as a multi technology reader that combines both 125kHz proximity and 13.56MHz capabilities in a single unit, delivering maximum compatibility while providing a path forward to the latest technology. The multi technology reader is ideal for organizations that wish to transition to smart technology at their own pace, as it means they don't need to replace all their cards up front.

Optional Bluetooth® / NFC Credential Reading

Bluetooth® / NFC capability enables you to use your smartphone as your access credential for maximum convenience.

Equipped with support for most modern iOS and Android devices, you can unlock the door using a unique access credential that is entered against your user record in Protege, and authenticated by a secure cloud based server.

Flexible Communication

Choose between the intelligent RS-485 connection for fast, flexible, secure communication, or Wiegand for compatibility with all standard access control systems. RS-485 provides the added benefits of being easier and more cost effective to wire and deploy, and allows for direct integration with Protege systems, enabling you to make changes on the fly once readers are installed. RS-485 also allows for longer cable runs and offers a simpler firmware update process.

OSDP Communication

The OSDP protocol improves interoperability and adds scalability, flexibility and ease of implementation.

OSDP with secure channel offers additional security with AES-128 encryption and predefined key management and authentication.

For specifications and reader configuration, refer to AN-321 Configuring tSec Multi-Technology Card Readers for OSDP Communication, available from the ICT website.

Configurable LED Strip

The tSec Reader provides the ability to change the color of the LED strip (16 colors available) to show when a function has started, succeeded or failed. For example, for a function that is used to arm an area you might set the LED to change to orange to show that the function has started, yellow to show that the area has armed successfully, and red to indicate when the function has failed.

*This feature is only supported when wired using RS-485.

IP65 Protection

The IP65 environmental rating provides a high degree of protection from the elements, making the reader suitable for harsh environments. Readers can be mounted indoors or outdoors, located anywhere from the car park gate to the office door.

Optional Vandal Resistant Cover

Designed to withstand some of the harshest settings, the optional vandal resistant covers are ideal for locations where a card reader may be exposed to damage, including corridors, parking buildings, correctional facilities, and other public places. Highly resistant to impact, such as from the swing of a hammer or baseball bat, its robust construction provides greater durability and protection against vandalism and malicious damage. The flush design also serves as an anti-ligature measure for an additional level of safety.



Covers can be ordered using the following part codes:

- > tSec Standard Reader: PRX-SVRC
- > tSec Extra Reader: PRX-XVRC
- > tSec Mini Reader: PRX-MVRC

Mounted correctly, the tSec Reader Vandal Resistant Cover is compliant to DHF TS 001:2013, the ENHANCED REQUIREMENTS & TEST METHODS FOR ANTI-LIGATURE HARDWARE to grade B4 for vertical direction devices and to impact level IK10.

Keypad Support

Regular keypad variations of the tSec Reader range do not operate correctly with the vandal resistant covers that are provided separately. You must order the reader as a kit (including the cover) using one of the following part codes:

- > tSec Standard Reader: PRX-TSEC-STD-KP-VRC (Multi Technology), PRX-TSEC-STD-DF-KP-VRC (13.56MHz), PRX-TSEC-STD-KP-BT-B-VRC (Multi Technology with Bluetooth® Wireless Technology).
- Stee Extra Reader: PRX-TSEC-EXTRA-KP-VRC (Multi Technology), PRX-TSEC-EXTRA-DF-KP-VRC (13.56MHz), PRX-TSEC-EXTRA-KP-BT-B-VRC (Multi Technology with Bluetooth® Wireless Technology).

Available Models / Ordering Information

The tSec Extra Reader is available with a range of features.

tSec Extra Reader			117 x 75x 18mm (4.61 x 2.95 x 0.71″)			
	Keypad	125kHz	MIFARE/ DESFire/ NFC	Bluetooth® Technology	Vandal Resistant Cover*	
PRX-TSEC-EXTRA-KP-B						
tSec Extra Multi-Technology Card Reader with Keypad						
PRX-TSEC-EXTRA-125-B						
tSec Extra 125kHz Card Reader						
PRX-TSEC-EXTRA-DF-B						
tSec Extra 13.56MHz Card Reader						
PRX-TSEC-EXTRA-DF-KP-B						
tSec Extra 13.56MHz Card Reader with Keypad						
PRX-TSEC-EXTRA-BT-B						
PRX-TSEC-EXTRA-BT-W						
tSec Extra Multi-Technology Card Reader with Bluetooth® Wireless Technology						
PRX-TSEC-EXTRA-KP-BT-B						
PRX-TSEC-EXTRA-KP-BT-W						
tSec Extra Multi-Technology Card Reader with Keypad and Bluetooth® Wireless						
Technology						
PRX-TSEC-EXTRA-KP-BT-B-VRC						
tSec Extra Multi-Technology Card Reader with Keypad, Vandal Resistant Cover						
and Bluetooth® Wireless Technology						
PRX-TSEC-EXTRA-DF-BT-B						
tSec Extra 13.56MHz Card Reader with Bluetooth® Wireless Technology				-		

* Keypad editions with vandal resistant cover included. Covers may be purchased separately for readers without keypads, but regular keypad editions do not support vandal resistant covers.

Technical Specifications

Power Supply Event Supply Operating Voltage IZVDC (9.5 to I4VDC) Spectrating Current ISsee Standard Reader: 256mA (Peak, Reading) ISsee Kinn Reader: 298mA (Peak, Reading) ISsee Kinn Reader: 298mA (Peak, Reading) Communications Essee Kinn Reader: 298mA (Peak, Reading) Card Read Range DESTIFE EVI So Tom (0.50°* DESTIFE EVI So Tom (0.50°* T25kHz (Jamshell 40mm (1.57)* Fag Read Range DESTIFE EVI So Tom (0.23?)* IZSKI IZ Somm (0.29° T25kHz (Jamshell 40mm (1.57)* Fag Read Range DESTIFE EVI Son Tom (0.29?)* IZSKI IZ Somm (0.29?)* T25kHz (Jamshell 40mm (0.57)* Standard Range DESTIFE EVI Son Tom (0.27)* Village and Interface Multiple format: 20 or 34 Bit data 0 and data 1 card defined ************************************	Ordering Information					
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	Environment IP Rating	IP65				
	Operating Temperature	UL/ULC -35° to 66°C (-31° to 151°F) : EU EN -40° to 70°C (-40° to 158°F)				
Storage Temperature -10° to 85°C (14° to 185°F)	Storage Temperature	-10° to 85°C (14° to 185°F)				
Mean Time Between Failures (MTBF) 520,834 hours (calculated using RFD 2000 (UTE C 80-810) Standard)	Mean Time Between Failures (MTBF)	520,834 hours (calculated using RFD 2000 (UTE C 80-810) Standard)				
Dimensions	Dimensions					

Reader Dimensions (H x W x D)	tSec Extra Reader: 117 x 75 x 18	tSec Standard Reader: 117 x 46 x 18mm (4.61 x 1.81 x 0.71") tSec Extra Reader: 117 x 75 x 18mm (4.61 x 2.95 x 0.71") tSec Mini Reader: 85 x 46 x 17mm (3.35 x 1.81 x 0.67")				
Vandal Resistant Cover (H x W x D)	PRX-XVRC tSec Extra Reader	PRX-SVRC tSec Standard Reader cover: 162 x 91 x 22.6mm (6.37 x 3.58 x 0.88") PRX-XVRC tSec Extra Reader cover: 162 x 120 x 22.6mm (6.37 x 4.72 x 0.88") PRX-MVRC tSec Mini Reader cover: 127 x 88 x 20mm (5.0 x 3.46 x 0.78")				
Reader Weights		Net Weight	Gross Weight			
tSec Standard Reader tSec Standard Reader with VRC		110g (3.9oz) 190g (6.7oz)	130g (4.6oz) 280g (9.9oz)			
tSec Extra Reader tSec Extra Reader (UHF) tSec Extra Reader with VRC		160g (5.6oz) 180g (6.3oz) 270g (9.5oz)	190g (6.7oz) 200g (7.1oz) 360g (12.7oz)			
tSec Mini Reader		80g (2.8oz)	100g (3.5oz)			

* Applies to MIFARE/DESFire and Multi-Technology models only

* Applies to 125kHz and Multi-Technology models only

** Applies to Bluetooth® wireless technology enabled models only

*** Applies to NFC capable models only

The size of conductor used for the supply of power to the unit should be adequate to prevent voltage drop at the terminals of no more than 5% of the rated supply voltage.

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Regulatory Notices

New Zealand (RSM) and Australia (RCM)

This equipment carries the R-NZ label and complies with EMC and radio communications regulations of the Australian Communications and Media Authority (ACMA) governing the Australian and New Zealand (AS/NZ) 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)

- > UL 294 for Access Control System Units
- > CAN/ULC S319 for Electronic Access Control Systems

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)

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.

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

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