430209001
T-500SW Reader mullion, gray*

Overview

Transition™ Series multi-technology access readers feature simultaneous compatibility with multi-vendor credential technologies—UTC and HID 125 kHz Proximity, HID Corporate 1000 Proximity, 13.56 MHz contactless smart card technologies for MIFARE® Card Serial Number (ISO 14443A), MIFARE/DESFire Card Serial Number, and Vicinity Card Serial Number (ISO 15693), including HID iCLASS® Card Serial Number—all in one reader. With this remarkable technology combination, security administrators can now deploy the Transition readers into existing or new facilities or systems—continuing to serve existing card-carrying users while migrating to the latest in security and smart-card technology advancements.

No matter which credential technology an organization currently employs, Transition readers allow continued use of existing systems and features—but more importantly, they also offer the ability to transition to new and more secure
smart card technology. Transition readers offer security system administrators an economical solution to migrate to this new technology and better secure their businesses, all on their own timelines and budgets.

Supported Card Technologies :

• UTC ProxLiteTM, ISO ProxLite, and ProxLite key fobs and tags
• HID 125 kHz ProxCard II, ISOProx II, ProxKey II, ProxCard and Corporate 1000 (custom formats)
• MIFARE ISO 14443A Card Serial Number (CSN)
• MIFARE/DESFire CSN
• Vicinity ISO 15693 CSN
• HID iCLASS CSN

Read Range

Distances may vary depending on environment.

Model T-500SW/W:
• UTC Proximity—up to 8.89 cm
• HID Proximity and Corporate 1000—up to 8.89 cm
• MIFARE and MIFARE/DESFire—up to 2.54 cm
  Ultralight cards not supported
• Vicinity—up to 8.89 cm
• iCLASS—up to 8.89 cm

Model T-520SW/W, T-525SW/W:
• UTC Proximity—up to 15.24 cm
• HID Proximity and Corporate 1000—up to 15.24 cm
• MIFARE and MIFARE/DESFire—up to 2.54 cm
  Ultralight cards not supported
• Vicinity—up to 15.24 cm
• iCLASS—up to 15.24 cm

Details

• Configuration card (supplied) sets the Transition reader to 2-state or 4-state supervised F/2F mode, or for Wiegand data output (T-500SW versions only).
• Supports UTC and HID Corporation (including Corporate 1000) Proximity, MIFARE CSN (ISO 14443A), MIFARE/DESFire CSN, and Vicinity CSN (ISO 15693) credentials, including HID iCLASS CSN
• Accepts 6-16 VDC power input
• Allows easy migration from Proximity to Mifare, and Vicinity Smart Card technologies
• Offers high-reliability, consistent read-range performance, and low-power consumption
• Installs on both metal and non-metal surfaces
• Provides tri-color LED and beep indication for status, alarm, and tamper conditions
• Internal tamper alarm alerts security personnel if the reader is breached

Intelligent Supervision

 "SW" series of Transition readers provides superior value when performance-matched with select access control platforms. UTC offers intelligent supervision (F/2F Supervised mode) that continuously monitors communication between the access control panel, the reader at the door, and door contact and Request-to-Exit (REX)equipment. The unique four-state supervision of the Transition readers monitors and reports cut and short-circuit lines. There's also an internal tamper-alarm mechanism, so security staff are immediately notified if a reader is tampered with, a door is breached or a cable is cut or shorted. Tri-color LED and audible alerts indicate status, alarm and perimeter-tampering conditions—giving you more security than is possible with conventional Wiegand-based installations.

Versatile Security System Compatibility

 "W" series multi-technology Wiegand-output models (T-500W/ T-520W/T-525W) work with all access control systems that use Wiegand-based data communications between 26 and 176 bits. This includes compatibility with UTC's CASI, InfoGraphics, EST and IDenticard product lines.

Optimizing Any Environment

With an optimization technology that adjusts to a wide range of installation environments, Transition readers are adaptable to just about any application. The reader's design accommodates both metal and non-metal environments, and come in a variety of wall and doorframe models to ensure cardholders experience consistent read-range performance for all types of installations and climates.

Versatile, rugged and backed for life

Transition readers are available with or without keypads, in a compact housing that comes in light gray, charcoal or black. Durable UV-resistant material inhibits discoloration in all types of indoor and outdoor conditions, including direct sunlight. The readers also feature advanced electronics and circuitry, and they are sealed for protection against inclement weather. Combine all this protection with a lifetime warranty, and any organization can confidently expect years of exemplary reader performance.

While the readers include powerful electronics for superior read-range performance with any technology, they also meet 6-16 VDC requirements and feature low-level power consumption. With their rugged design and impressive versatility, you can count on GE readers for years of consistent and reliable access-card performance.

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Technical specifications

Technology

Reader type	Multi-frequency
Reader operating-transmitting frequency	125 KHz, 13.56 MHz
Supported technology 13.56 MHz	iCLASS (CSN), MIFARE Classic (CSN), MIFARE DESFire (CSN)
Supported technology 125 kHz	Corporate 1000, GE ProxLite/CASI Prox, HID Prox
Mifare type	ISO14443A
No. of Mifare bytes CSN	4 Byte (S50)
Read write	No
SAM module embedded	No

System

Reading distance	13.56 MHz: up to 11.4 cm[/]125 kHz: up to 12.7 cm
Max. reader distance to panel	Wiegand: 152 m[/] Supervised F/2F: 914 m
RTE (Request To Exit)	No
CSN (Card Serial Number)	Yes
Custom data model	No
Vicinity type	ISO15693
No. of LEDs	1
No. of covers included	1

Interface & connections

Interface	Wiegand
Connector type	Pigtail
Pigtail length	30 cm

Tamper type

Pry-off tamper	No
Opening tamper	No

Operation

Stand-alone	No
PIN keypad	No

Electrical

Power supply type	VDC
Power supply value	8 to 16 VDC
Current consumption	95 mA at 16 VDC

Physical

Physical dimensions	44 x 148 x 30 mm
Net weight	270 g
Shipping weight	310 g
Material	PBT Polymer
Form factor	US gangbox
Mounting type	Surface Mount

Environmental

Operating temperature	-25 to +65°C
Storage temperature	-25 to +65°C
Relative humidity	0 to 95% noncondensing
Environment	Outdoor
IP rating	IP 65

Standards & regulation

Compliancy	CE, FCC, RoHS

Colour

	Grey, charcoal, and black

Certifications

	FCC
	CE
	UL 294

Dimensions (W x H x D)

	T-500SW/W : 44 x 148 x 30 mm
	T-520SW/W and T525SW/W : 148.6 x 114.3 x 31.7 mm

Operating temperature

	-25 to 65°C

IP Rating

	IP 65

Relative humidity

	0 to 95%, non-condensing

Wiring

	UTC F/2F : 4 conductors (min.)
	Wiegand : 5 conductors (minimum)

Cabling distance

	UTC F/2F systems : up to 914 m at 12VDC
	Wiegand output : up to 152 m

System compatibility

Microcontrollers	Micro/5-PX and Micro/5-PXN, Micro/PX-2000 and Micro/PXN-2000
Access control systems	Picture Perfect Editions 1.7 or higher, and microcontroller firmware 1.72 or higher
Access control systems	Secure Perfect Editions 5.0 or higher, and microcontoller firmware 5.0.02 or higher

Credentials

	For detailed system compliance specifications, refer to the reader installation guide
Proximity (125 KHz)	ProxLite, ISOProx, key fobs, and tags (Note: Proximity Perfect cards are not supported)
	Mifare (ISO 14443A) Mifare Standard, Mifare Light, Mifare Ultra Light, key fobs, and tags
Vicinity ISO 15693	Infineon My-D 2K-S, 2K-P, 10K-S, 10K-P, SLI-2, key fobs, and tags

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