Overview

GE Transition™ Series multi-technology access readers feature simultaneous compatibility with multi-vendor credential technologies—GE 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.

Supported Card Technologies:
- GE ProxLite™, 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
- Optional GSA approved PIV support

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.

Transition readers also bring value to multi-tenant applications by allowing occupants to use the same cards for access to buildings and common areas, as well as for general use in their interior spaces.

Standard Features

- Configuration card (supplied) sets the Transition readers to two-state or four-state supervised F/2F mode, or to Wiegand data output (T-5xxSW versions only)
- Simultaneously supports GE 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 LEDs and beep indication for status, alarm and tamper conditions
- Internal tamper alarm alerts security personnel if the reader is breached
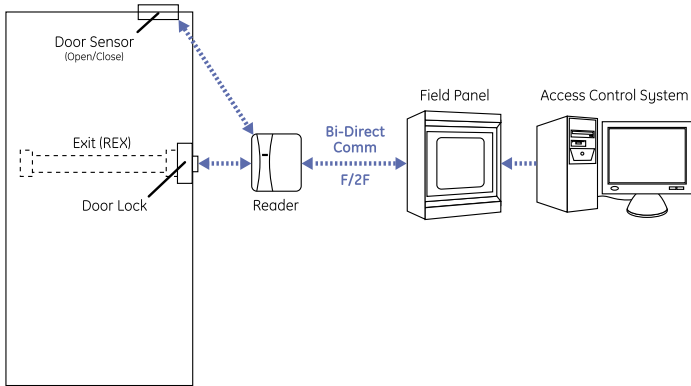
Award-Winning Multi-Technology Access Readers

Transition Series
Multi-Technology Access Readers

Now includes a full line of PIV compliant readers

Intelligent Supervision

GE's "SW" series of Transition readers provides superior value when performance-matched with select GE access control platforms. Only GE 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.

Door Sensor (Open/Close)

Exit (REX)

Door Lock

Reader

Bi-Direct Comm F/2F

Field Panel

Access Control System

Versatile Security System Compatibility

GE's "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 GE's M and ACU series access controllers, as well as EST Synergy-enabled systems.

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 comes in a variety of wall and doorframe models to ensure card-holders 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 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.

Award-Winning Innovation

GE was awarded the Frost & Sullivan* Award for Product Innovation for the Transition Series readers and was recognized as the first company to introduce this unique solution to the marketplace. The award recognizes products with unique or revolutionary technology that offers significant added value for customers.

*Frost & Sullivan was founded in 1961 with a specific mission: to publish world-class marketing consulting information and intelligence on emerging high technology and industrial markets. Now well into its fourth decade, Frost and Sullivan has won a worldwide reputation for publishing high-quality growth consulting and training reports in more than 20 major industries.

Recipient of the

FROST & SULLIVAN

Product Innovation Award

Specifications

Color Options
- Gray, charcoal, or black (T-5XXW and T-5XXSW versions)
- Black only (T-5XX-PIV)

Agency Approvals
- FCC Part 15
- CE mark
- UL 294
- GSA Approved for FIPS-201

Physical Dimensions
- Model T-500SW/W and W/PIV: 5.85 in x 1.75 in x 1.16 in (148.6 mm x 44.5 mm x 29.5 mm)
- Model T-520SW/W and T-525SW/W and W/PIV: 5.85 in x 4.5 in x 1.24 in (148.6 mm x 114.3 mm x 31.7 mm)

Read Range

	T-500SW/W	T-500W-PIV	T-520W-PIV T-525W-PIV	T-520SW/W T-525SW/W
GE Proximity	up to 3.5 in (8.89 cm)		up to 5 in (15.24 cm)	
HID Proximity & Corporate 1000				
MIFARE & MIFARE/DESFire	up to 1 in (2.54 cm); Ultralight cards not supported	N/A	N/A	up to 1 in (2.54 cm); Ultralight cards not supported
Vicinity	up to 3.5 in (8.89 cm)			up to 5 in (15.24 cm)
iCLASS				
GSA PIV Data Model	N/A	up to 1 in (2.54 cm)		N/A

Distances may vary depending on environment.

Operating Temperature Range
- -13 to 149 °F (-25 to 65 °C)

Relative Humidity
- 0% to 95% (non-condensing)

Minimum Wiring
- GE F/2F systems: 4 conductors (minimum)
- Wiegand-based systems: 5 conductors (minimum)

Cabling Distance
- GE F/2F systems: up to 3,000 ft. (914 m) @ 12 VDC
- Wiegand-based systems: up to 500 ft. (152 m) @ 12 VDC

GE System Compatibility
Access Control Systems:
- Secure Perfect with microcontroller version 5.0.02 and later
- Picture Perfect with microcontroller version 1.72 and later
- Topaz, Sapphire Pro and Diamond II with ACU firmware version 5.76 and later
- Facility Commander Wnx version 7.0

For detailed system compliance specifications, refer to the reader installation guide

Control Panels and Reader Interfaces:
- M5 PX and M5 PXN: 2RP, 2SRP, 8RP, and WIU-2/4
- M2000 PX and M2000 PXN: Directly wired and WIU-2/4
- ACURT, ACURS, ACUXL, RREx and IKE
- Micro/Reader Junction Box, Bioscrypt V-Flex
- Universal Wedge, and Fiber Options F/2F transceiver/receivers

Credential Technologies
- GE Proximity (125 kHz): ProxLite, ISO ProxLite, and ProxLite key fobs and tags *(Note: Proximity Perfect cards are not supported)*
- HID Corporation Proximity (125 kHz): ProxCard II, ISOProx II, ProxKey II, ProxCard and all Corporate 1000 (custom formats)
- HID Corporation iCLASS CSN (13.56 MHz): iCLASS cards, key fobs, and tags
- MIFARE CSN (ISO 14443A): MIFARE Standard, DESFire CSN, key fobs and tags
- Vicinity CSN (ISO 15693): Infineon Technologies My-D 2K-S, 2K-P, 10K-S, 10K-P, SLI-2, key fobs and tags
- US Government PIV Data Model, support on PIV models only

Feature and Format Specifications

	Transition T-5xxW	Readers T-5xxW-PIV	Readers T-5xxSW
Supported Credential Technologies			
Proximity Cards			
GE Proximity	•	•	•
HID Proximity	•	•	•
HID Proximity Corp. 1000	•	•	•
Smart Cards			
Mifare (ISO 14443A) Card Serial Number (CSN)	•		•
Mifare/DESFire CSN	•		•
Vicinity (ISO 15693) CSN	•		•
HID iClass CSN	•		•
GSA PIV Data Model		•	

Reader Communication			
Wiegand	•	•	•
Supervised F/2F (GE CASI systems only)			•
> Bi-directional Communication			•
> Alarm Detection / Reporting			•
> Automatic Offline (active alarm condition)			•
> Cut and Short-circuit Line Detection			•

External Door Monitoring/Reporting			
Request to Exit Status			•
Door Sensor Status			•

ISO Credential Compliance			
Mifare (ISO 14443A)	•	•	•
Vicinity (ISO 15693)	•		•

Programming Card Configurations (Field Programmable)			
2- / 4-State F/2F Supervision			•
Unsupervised F/2F Supervision			•
40-bit Wiegand (Fixed)	•		•
55-bit Wiegand (Fixed)	•		•
64-bit Wiegand (Fixed)	•		•
Beeper On/Off	•		•

Ordering Information

For GE's CASI and Wiegand-based access control systems:

Part Number	Description
430209001	T-500SW mullion, gray
430209002	T-500SW mullion, charcoal
430209003	T-500SW mullion, black
430210001	T-520SW 1-gang, gray
430210002	T-520SW 1-gang, charcoal
430210003	T-520SW 1-gang, black
430211001	T-525SW 1-gang, gray with 12-key pad
430211002	T-525SW 1-gang, charcoal with 12-key pad
430211003	T-525SW 1-gang, black with 12-key pad
521209001	T-500SW mullion, gray with M/RJ box
521209002	T-500SW mullion, charcoal with M/RJ box
521209003	T-500SW mullion, black with M/RJ box
521210001	T-520SW 1-gang, gray with M/RJ box
521210002	T-520SW 1-gang, charcoal with M/RJ box
521210003	T-520SW 1-gang, black with M/RJ box
521211001	T-525SW 1-gang, gray with 12-key pad and M/RJ box
521211002	T-525SW 1-gang, charcoal with 12-key pad and M/RJ box
521211003	T-525SW 1-gang, black with 12-key pad and M/RJ box

For Wiegand-based access control systems only:

Part Number	Description
430209004	T-500W mullion, gray
430209005	T-500W mullion, charcoal
430209006	T-500W mullion, black
430210004	T-520W 1-gang, gray
430210005	T-520W 1-gang, charcoal
430210006	T-520W 1-gang, black
430211004	T-525W 1-gang, gray with 12-key pad
430211005	T-525W 1-gang, charcoal with 12-key pad
430211006	T-525W 1-gang, black with 12-key pad
385001001	Installation wrench (required for all reader models)

For FIPS 201 PIV Data Model readers, Wiegand-based access control systems only:

Part Number	Description
430212006	T-500W-PIV mullion, black
430213006	T-520W-PIV 1-gang, black
430214006	T-525W-PIV 1-gang, black with 12-key pad

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