



iCLASS[®] Readers



13.56 MHZ CONTACTLESS SMART CARD READERS. PLUG-N-PLAY WITH NEW AND EXISTING ACCESS CONTROL SYSTEMS

- **Simple Upgrades** - iCLASS[®] readers have the same wiring connections, same low-current consumption and same 5 to 12 volt operation as our Prox readers
- **Multiple Applications** - HID Connect offers over 70 technology partners which have embedded iCLASS technology into their products providing a single card solution for all your application requirements
- **GSA approved** - Included in the U.S. General Services Administration (GSA) FIPS 201 Approved Products List
- **Field Upgradeable** - Utilize firmware upgrade cards to modify reader firmware while installed on site

iCLASS[®] 13.56 MHz contactless smart cards and readers make access control more powerful, more versatile and offer enhanced security through data encryption and mutual authentication between the card and reader.

iCLASS readers are user-friendly, delivering the same convenience and reliability of HID's world-renowned Prox technology, with state-of-the-art features, driven by evolving industry requirements.

Upgrading from Prox to iCLASS technology has never been so simple. All iCLASS readers provide the same wiring connections, low-current consumption and 5 to 16 volt operation as our Prox readers. Additionally, you can transfer your Prox format and user identification numbers to iCLASS credentials, making the change completely transparent to your access control system.

Key Features

- **Format Portability** - Upgrading is completely transparent since the same

Prox format and user identification numbers are brought across to your iCLASS credentials, including HID Corporate 1000 formats. Also, Elite custom key program is available for a higher level of security.

- **Secure** - All RF data transmission between the card and reader is encrypted using a secure algorithm. By using industry-standard encryption techniques and advanced key management systems, iCLASS reduces the risk of compromised data or duplicated cards.
- **Interoperability** - iCLASS is based on ISO interoperability standards providing compatibility with many popular card technologies (ISO 15693, ISO 14443A and ISO 14443B).
- **Optimal Read Range Performance** - An auto-tuning feature automatically adjusts the reader for optimal read range performance on any mounting surface.

FEATURES:

- Security** - 64-bit authentication keys are extremely secure. Readers and cards require matching keys to function. All RF data transmission between the card and reader is encrypted using a secure algorithm. The key management system reduces the risk of compromised data or duplicated cards.
- Elite Custom Keys** - Custom keys provide the highest level of security, where cards and readers are uniquely matched to individual sites or customers, and are non-interchangeable. Combining Elite custom keys with our Corporate 1000 can offer companies a scalable solution that can be implemented in facilities worldwide.
- Audiovisual Indication** - Audio sounder provides various tone sequences to signify access granted, access denied, power up and diagnostics. Visually impaired cardholders can easily distinguish between access granted and access denied. A high-intensity light bar provides a clear visual status indication in red, green or amber, even in bright sunlight. **Note:** Light bar will illuminate amber when a FIPS 201/PIV card is read.
- Indoor/Outdoor Design** - Rugged, weatherized polycarbonate enclosure, designed to withstand harsh environments, provides reliable performance and resistance to vandalism.
- Easily Interfaced** - The reader's Wiegand output easily interfaces with most existing Wiegand and Clock-and-Data protocol access control panels. The reader reads standard proximity format data from HID iCLASS® cards and will output data as encoded. When reading ISO 14443A cards (MIFARE®/ DESFire®), the reader can be configured to output 26-bit, 32-bit (MSB), 32-bit (LSB), 34-bit, 40-bit or 56-bit Wiegand formats based on the CSN (card serial number).
- Options** -
 Colors - Black or Gray
 Key Management - Standard or Elite Selectable Output Type (for MIFARE cards)
 Termination Options - 18" Pigtail or Terminal Strip
 Programmable LED/Beeper operation
 Accessory - Security Tool; 04-0001-03
 Transit - Enable FeliCa IDm and/or CEPAS CAN/CSN

SPECIFICATIONS



*Model Name	R10	R15	R30	R40
Model Number	6100C (Wiegand) 6108C (Clock-and-Data) 6109C (Transit)	6140C (Wiegand) 6148C (Clock-and-Data) 6149C (Transit)	6110C (Wiegand) 6118C (Clock-and-Data) 6119C (Transit)	6120C (Wiegand) 6128C (Clock-and-Data) 6129C (Transit)
**Read Range	iCLASS Card : Up to 3.25" (8.9 cm) iCLASS Key/Tag : Up to 1.5" (3.8 cm) Mifare / DESFire Card (CSN) : Up to 2.0" (5.1 cm)	iCLASS Card: Up to 3.5" (8.9 cm) iCLASS Key/Tag : Up to 1.5" (3.8 cm) Mifare / DESFire Card (CSN) : Up to 2.0" (5.1 cm)	iCLASS Card : Up to 4.0" (10.2 cm) iCLASS Key/Tag : Up to 2.0" (5.1 cm) Mifare / DESFire Card (CSN) : Up to 2.75" (7.0 cm)	iCLASS Card : Up to 4.75" (12.1 cm) iCLASS Key/Tag : Up to 2.0" (5.1 cm) Mifare / DESFire Card (CSN) : Up to 2.5" (6.4 cm)
Mounting	The R10 and R15 are physically our smallest readers and are ideally suited for mullion-mounted door installations, U.S. single-gang J-box or any flat surface (Reader will not cover junction box).		The R30 is 83.8 mm (3.3") square reader is designed to mount to and coverstandard European and Asian back boxes.	The R40 is designed to mount and cover single gang switch boxes primarily used in the United States and includes a slotted mounting plate for European and Asian back box spacing.
Color	Black or Gray			
Keypad	No			
Dimensions	1.9" x 4.0" x 0.9" 4.8 cm x 10.3 cm x 2.3 cm	1.9" x 6.0" x 0.9" 4.8 cm x 15.3 cm x 2.3 cm	3.3" x 3.3" x 0.9" 8.4 cm x 8.4 cm x 2.3 cm	3.3" x 4.8" x 1.0" 8.4 cm x 12.2 cm x 2.4 cm
Power Supply	5-16 VDC, Linear supply recommended			
Power Requirements (Standard Power)	55 mA AVG, 116 mA PEAK	55 mA AVG, 112 mA PEAK	55 mA AVG, 121 mA PEAK	55 mA AVG, 121 mA PEAK
Operating Temperature	-31° to 150° F (-35° to 65° C)			
Operating Humidity	5% to 95% relative humidity non-condensing			
Transmit Frequency	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz
13.56 MHz Card Compatibility	15693 - read only; 2k bit (256 Byte), 16k bit (2k Byte), 32k bit (4k Byte) iCLASS credentials, serial number / 14443B - read only; 2k bit (256 Byte), 16k bit (2k Byte), 32k bit (4k Byte) iCLASS credentials serial number / 14443A - read only; MIFARE® and DESFire (serial number) / US Government PIV / FeliCa IDm (Transit Readers Only) / CEPAS CAN/CSN (Transit Readers Only)			
Environmental	IP55			
Cable Distance	Wiegand/Clock-and-Data Interface 500ft (150m) 22 AWG			
Termination	Pigtail or Terminal Strip			
Certifications	UL294/cUL (US), FCC Certification (US), IC (Canada), CE (EU), C-tick (Australia, New Zealand), SRRR (China), MIC (Korea), NCC (Taiwan), iDA (Singapore), RoHS			
Housing Material	UL94 Polycarbonate			
Family Model	R-640X-300			
Warranty	Lifetime			

*Consult How to Order Guide for specific ordering instructions.

**Dependent upon installation conditions

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