

iCLASS[®] R10, R30, R40 Readers

13.56 MHz Contactless Smart Card Readers.
Plug-n-play with new and existing access control systems.

- ▶ **Simple Upgrades** - Upgrades are simple because iCLASS readers have the same wiring connections, same low-current consumption, and same 5 or 12 volt operation as our Prox readers.
- ▶ **Tailor-Made Readers** - iCLASS readers have the ability to be completely customized to meet the needs of a specific project or to seamlessly blend with a controller to maximize the performance of a proprietary system.
- ▶ **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.



ACCESS flexibility

iCLASS smart readers and cards make access control more powerful, more versatile and offer enhanced security through data encryption and mutual authentication between the reader and cards.

iCLASS readers are user-friendly, delivering the same convenience and reliability of our Prox technology, for which HID is known worldwide, 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 or 12 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 controller.

Key Features

- ▶ **Format Portability** - Upgrading is completely transparent since the same Prox format and user identification numbers are brought across to your future 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 international 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.

Key management is made easy! All cards are shipped with unique diversified keys, and readers are shipped with compatible keys. All keys are derived from the HID Standard transport key. While cards and readers with Standard keys are interchangeable, the keys are highly secure. Cards can be made unique by ordering with iCLASS® Elite formatting.

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 Corp. 1000 can offer companies a scalable solution that can be implemented in facilities worldwide.

Easily Interfaced

The reader's Wiegand output easily interfaces with most existing Wiegand 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 2-bit, 16-bit, 32-bit, 34-bit, 40-bit or 56-bit Wiegand formats based on the CSN (card serial number).

Indoor/Outdoor Design

Rugged, weatherized polycarbonate enclosure, designed to withstand harsh environments, provides reliable performance and resistance to vandalism.

Options

Colors - Black or Gray
Key Management - Standard or Custom
Selectable Output Type (for MIFARE cards)
Standard Termination - 18" (.5 m) cable pigtail
Programmable LED/Beeper operation
Accessory - Security Tool; 04-0001-03

	R10	R30	R40
Model Numbers	6100	6111	6120
* Read Range	iCLASS Card : Up to 3.25" iCLASS Key/Tag : Up to 1.5" MIFARE / DESFire Card (CSN) : Up to 2.0"	iCLASS Card : Up to 4.0" iCLASS Key/Tag : Up to 2.0" MIFARE / DESFire Card (CSN) : Up to 2.5"	iCLASS Card : Up to 4.25" iCLASS Key/Tag : Up to 2" MIFARE / DESFire Card (CSN) : Up to 2.5"
Mounting	The R10 is physically our smallest reader and is 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 (3.15") square reader is designed to mount to and cover standard 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.
Dimensions	1.90" x 4.04" x .80" 4.83 cm x 10.26 cm x 2.03 cm	3.3" x 3.3" x .75" 8.38 cm x 8.38 cm x 1.91 cm	3.30" x 4.80" x .85" 8.38 cm x 12.19 cm x 2.16 cm
Power Supply	Power Supply 5-16VDC, Linear supply recommended		
Current Requirements	50/75 mA @ 12VDC		
Operating Temperature	-40° to 150° F (-40° to 65° C)		
Operating Humidity	5% to 95% relative humidity non-condensing		
Transmit Frequency	13.56 MHz		
Cable Distance	Wiegand Interface 500ft (150m) 22 AWG		
Card Compatibility	• I5693 - read only; 2k bit (256 Byte), 16k bit (2k Byte), 32k bit (4k Byte) iCLASS credentials, CSN • I4443B - read only; 2k bit (256 Byte), 16k bit (2k Byte), 32k bit (4k Byte) iCLASS credentials • I4443A - read only; MIFARE® and DESFire (serial number),		
Certifications	UL 294/cUL, FCC Certification, Canada Certification CE Mark (Europe), New Zealand, Australia c-Tick Pending Certifications: Taiwan, Singapore, Germany VdS		
Housing Material	UL94 Polycarbonate		
Warranty	Warranted against defects in materials and workmanship for life. (See complete warranty policy for details.)		

*Dependent upon installation conditions.

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ACCESS experience.

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