**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.
**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 denied, power up and diagnostics.

**Wiegand/Clock-and-Data Interface**
- 500ft (150m) 22 AWG

**Dimensions**
- 1.9” x 4.0” x 0.9”
- 1.9” x 6.0” x 0.9”
- 3.3” x 3.3” x 0.9”
- 3.3” x 4.8” x 1.0”

**Current Requirements**
- 55mA AVG, 11mA PEAK
- 55mA AVG, 12mA PEAK
- 55mA AVG, 121mA PEAK

**Wiring Requirements**
- 5-16 VDC, Linear supply recommended

**Mounting**
- The R10 and R15 are physically our smallest readers and are ideally suited for multi-mounted door installations. U.S. single-gang j-box or any 1½” flat surface (Reader will not cover junction box).
- The R30 and R40 are 3.3” x 4.8” x 1.0”
- The R20 is 83.8 mm (3.3”) 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.

**Transmit Frequency**
- 13.56 MHz

**Card Compatibility**
- MIFARE / DESFire Card (CSN)
- iCLASS Key/Tag
- iCLASS Card
- 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)

**Certifications**
- UL94 Polycarbonate
- UL94C (Wiegand)
- UL949C (Transit)
- UL1008 (Wiegand)
- UL1098 (Transit)
- UL1049 (Wiegand)
- UL1078 (Transit)
- UL6498 (Wiegand)
- UL6978 (Transit)
- UL6708 (Wiegand)
- UL6979 (Transit)
- UL94 (Wiegand)
- UL95 (Transit)
- UL6108 (Wiegand)
- UL6109 (Transit)
- UL6118 (Wiegand)
- UL6119 (Transit)
- UL6128 (Wiegand)
- UL6129 (Transit)

**Options**
- Colors: Black or Gray
- Key Management: Standard or Elite
- Selectable Output Type (for MIFARE cards)

**Accessories**
- Router Accessory - Security Tool; 04-0001-03
- Accessory - Transit: Enable FeliCa IDm and/or CEPAS CAN/CSN

**Mounting Plate**
- Single gang
- Multiple-gang

**Weatherproof Housing**
- 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).

**Indoor/Outdoor Design**
- Rugged, weatherized polycarbonate enclosure, designed to withstand harsh environments, provides reliable performance and resistance to vandalism.

**Features**
- **Read Range**
  - ICLASS Card : Up to 3.25” (8.9 cm)
  - MIFARE / DESFire Card (CSN) : Up to 2.0” (5.1 cm)
- **Dimensions**
  - 1.9” x 4.0” x 0.9”
  - 1.9” x 6.0” x 0.9”
  - 3.3” x 3.3” x 0.9”
  - 3.3” x 4.8” x 1.0”
- **Current Requirements**
  - 55mA AVG, 11mA PEAK
  - 55mA AVG, 12mA PEAK
  - 55mA AVG, 121mA PEAK
- **Mounting**
  - The R10 and R15 are physically our smallest readers and are ideally suited for multi-mounted door installations. U.S. single-gang j-box or any 1½” flat surface (Reader will not cover junction box).
- **Transmit Frequency**
  - 13.56 MHz
- **Card Compatibility**
  - MIFARE / DESFire Card (CSN)
  - iCLASS Key/Tag
  - iCLASS Card
- **Certifications**
  - UL94 Polycarbonate
  - UL1008 (Wiegand)
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  - UL6119 (Transit)
  - UL6128 (Wiegand)
  - UL6129 (Transit)
- **Options**
  - Colors: Black or Gray
  - Key Management: Standard or Elite
  - Selectable Output Type (for MIFARE cards)

**Warranty**
- Warranted against defects in materials and workmanship for life. (See complete warranty policy for details.)

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