PHYSICAL ACCESS SOLUTIONS

iCLASS SE® Readers

HIGHLY ADAPTABLE AND SECURE HIGH FREQUENCY ACCESS CONTROL SOLUTION

- **Powerfully Secure** – Provides layered security beyond the card media for added protection to identity data using SIOs.
- **Adaptable** – Interoperable with a growing range of technologies and form factors including mobile devices utilizing Seos®.
- **Interoperable** – Open Supervised Device Protocol (OSDP) for secure, bidirectional communication.
- **Versatile** – Extended read range is available for applications such as parking and gate control solutions.

HID Global’s iCLASS SE® platform goes beyond the traditional smart card model to offer a secure, standards-based and flexible platform that has become the new benchmark for highly adaptable, interoperable and secure access control solutions. As part of HID Global’s iCLASS SE platform for advanced security, the readers utilize state-of-the-art authentication through the platform’s Secure Identity Object (SIO) data model for trusted and secure communication between the card and reader to prevent unauthorized access. The iCLASS SE reader line is built on the Security Industry Association (SIA) Open Supervised Device Protocol (OSDP) standard which also ensures secure transmission of data from the reader to the controller. Additionally, iCLASS SE readers support mobile devices utilizing Seos, enabling a new class of portable identity credentials that can be securely provisioned and safely embedded into both fixed and mobile devices.

iCLASS SE readers include Open Supervised Device Protocol (OSDP), a new Security Industry Association (SIA) standard that together with Secure Channel Protocol (SCP) provides secure communications and central management.

POWERFULLY SECURE:
- Multi-Layered Security – Ensures data authenticity and privacy through the multi-layered security of HID’s SIO.
- EAL5+ Certified Secure Element Hardware – Provides tamper-proof protection of keys/cryptographic operations.
- Secured communications using OSDP with Secure Channel Protocol.
- Expanded iCLASS Elite™ Program – Extends private security by protecting uniquely keyed credentials, SIOs and programming keys.

HIGHLY ADAPTABLE:
- Mobile device support using iCLASS Seos - enabling HID access control.
- Flexible to support future technologies.
- Field Programmable Readers – Provides secure upgrades for migration and extended lifecycle.

SUSTAINABILITY AND MANAGEMENT:
- Intelligent Power Management (IPM) – Reduces reader power consumption by as much as 75% compared to standard operating mode.
- Recycled Content – Contributes toward building LEED credits.

INTEROPERABLE:
- SIO Media Mapping – Simplifies deployment of third-party objects to multiple types of credentials.
- Industry standard communications using OSDP.
- Custom programming support to read models on MIFARE and MIFARE DESFire EV1 credentials.

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# SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model Name</th>
<th>R10</th>
<th>R15</th>
<th>R40</th>
<th>RK40</th>
<th>R90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Part Number</td>
<td>9010N</td>
<td>910N</td>
<td>920N</td>
<td>921N</td>
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## Typical Read Range

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## Color

- Black

## Keypad

- Yes (4x3)

## Dimensions

- 1.9 \( \times \) 4.1 \( \times \) 0.9
- 1.9 \( \times \) 6.0 \( \times \) 0.9
- 3.5 \( \times \) 4.8 \( \times \) 1.0
- 5.3 \( \times \) 4.8 \( \times \) 1.1

## Product Weight (Pigtail)

- 3.9 oz (113g)
- 65 oz (16V)
- 0.6 oz (16V)
- 60 oz (16V)

## Product Weight (Terminal Strip)

- 921N

## Operating Voltage Range

- Limited Lifetime

## Current Draw - Standard Power Mode

- 1.0 @ 16V
- 60 @ 16V

## Current Draw - Intelligent Power Management (IPM) Mode

- 35 @ 16V
- 35 @ 16V
- 40 @ 16V
- 60 @ 16V

## Peak Current Draw - Standard Power or IPM Mode

- 200 @ 16V
- 200 @ 16V
- 200 @ 16V
- 220 @ 16V

## NSC\(^1\) Power Consumption - Standard Power Mode

- 1.0 @ 16V
- 1.0 @ 16V
- 1.0 @ 16V
- 1.4 @ 16V

## NSC\(^2\) Power Consumption - w/ IPM

- 0.6 @ 16V
- 0.6 @ 16V
- 0.6 @ 16V
- 1 @ 16V

## Operating Temperature

- -31º to 150º F (-35º to 65º C)

## Storage Temperature

- -67º to 185º F (-55º to 85º C)

## Environmental Rating

- Indoor/Outdoor IPI5; IPE6 if installed with optional gasket

## Transmitt Frequency

- 13.56 MHz

## 13.56 MHz Card Compatibility

- Secure Identity Object\(^*\) (SIO) on iCLASS Seos, iCLASS SE/SR, MIFARE DESFire EVI and MIFARE Classic (On by Default)
- MIFARE Classic and MIFARE DESFire EVI product data models
- iCLASS Access Control Application (order with Standard interpreter)
- ISO/IEC 14443A (MIFARE) CSN, ISO/IEC 14443B CSN, ISO/IEC 15693 CSN
- FeliCa\(^*\) CSN, CEPAS\(^*\) CSN or CAN

## Communications

- Wiegand, Clock-and-Data, Open Supervised Device Protocol (OSPD) via RS485

## Panel Connection

- Pigtail or Terminal Strip

## Certifications

- UL294/UL (US), FCC Certification (US), IC (Canada), CE (EU), RCM (Australia, New Zealand), SRRC (China), KCC (Korea), NCC (Taiwan), IDA (Singapore), RoHS, FIPS201 Transparent FASC-N Reader, MIC (Japan)

## Cryto Processor

- EAL5+

## Housing Material

- UL94 Polycarbonate

## Manufactured with % of recycled content

- 10.5% (Pigtail)
- 11.0% (Terminal Strip)

## Manufactured with % of recycled content

- 10.5% (Terminal Strip)
- 11.0% (Terminal Strip)

## UL List Number

- R1OE
- R1SE
- R4OE
- RK40E
- R90E

## Warranty

- Limited Lifetime

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1. Read range listed is statistical mean rounded to nearest whole centimeter. HID Global testing occurs in open air. Some environmental conditions, including metallic mounting surface, can significantly degrade read range and performance; plastic or ferrite spacers are recommended to improve performance on metallic mounting surfaces.

2. Measured in accordance with UL294 standards: See Installation Guide for Details

3. NSC = Normal Standby Current; See Installation Guide for Details

4. Not available on R90 Model

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