iCLASS® RK40 and RWK400 Readers

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

▶ **Dual-Factor Authentication** - Add secure pins to
the already highly secured iCLASS card and reader
authentication.
▶ **Flexible Configuration** - Choose from a variety
of pin pad outputs that allow for compatibility with
almost any panel.
▶ **Backlit** - Use lighted numbers to assist users during
operation in poorly lit areas.

ACCESS flexibility.

HID

Using 13.56 MHz contactless smart card technology, the iCLASS RK40 and RWK400 provide a
powerful solution. Combine a contactless card presentation with a personal identification number
(PIN) to support dual authentication of identity. Or, configure the panel for single-factor
authentication, using only a card or a PIN.

The PIN can be verified either at the access control panel or locally by the keypad reader.
When verified locally, the PIN must be programmed into the iCLASS card using the iCLASS Card
Programmer (CP400).

The RWK400 offers the same features as the RK40, with the extended ability to read/write user
data to HID iCLASS credentials. Read/write applications include the storage/retrieval of data such
as biometric templates, health records, time and attendance, and digital cash. The possibilities are
endless!

Featuring crisp architectural styling, the keypad reader and reader/writer have an elegantly curved
faceplate. The 12-position weatherproof keypad uses discrete switches to provide positive tactile
response, optionally reinforced by an audible tone. The keypad also features a waterproof silicone
rubber boot, vandal-resistant metal keycaps, and backlit numbering.

The readers are equipped with a Wiegand output that easily interfaces with most existing access
control panels. The RWK400 is equipped with bi-directional communications of RS232, RS485
(full-duplex), UART or USB to enable host controlled reader behavior. In addition, uni-directional
communication of RS232, RS485 (full-duplex) or UART is enabled when the reader is running its
own internal applications. In addition the RK40 can be configured to output data over Clock-and-
Data hardware interface.

The iCLASS RK40 and RWK400 are compatible with all iCLASS credentials. The units can read
or read/write to credentials compatible with several ISO standards (See back page for more
details).

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.

Keypad
Twelve discrete switches are covered with a silicone rubber boot and vandal resistant metal keycaps. Raised tactile mark on "5" key for visually impaired users. Configurable audio feedback. Backlit numbers in bezel overlay, above each key. Lighting is configurable: "Always On", "Always Off", "Triggered by Card Read", or "Triggered by Key Press". Configure the reader for single-key or buffered output, or pin on card authentication.

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.

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
Programmable Keypad Output
Accessory - Security Tool; 04-0001-03
Transit - Enable FeliCa IDm

	RK40	RWK400
*Model Numbers	6130B (Wiegand) 6138 (Clock-and-Data) 6139 (Transit)	6131BxT (Wiegand and RS232) 6131Bx4 (Wiegand and Full Duplex RS485) 6131BxU (Wiegand and USB) 6131BxB (Wiegand and UART)
**Read Range	iCLASS Card: Up to 4" (10.2 cm) iCLASS Key/Tag: Up to 1.25" (3.2 cm) MIFARE / DESFire Card (CSN): Up to 2" (5.1 cm)	iCLASS Card: Up to 4" (10.2 cm) iCLASS Key/Tag: Up to 1.25" (3.2 cm) MIFARE / DESFire Card (CSN): Up to 2" (5.1 cm)
Mounting	The RK40 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.	The RWK40 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	3.3" x 4.8" x 1.1" 8.5 cm x 12.2 cm x 2.8 cm	3.3" x 4.8" x 1.1" 8.5 cm x 12.2 cm x 2.8 cm
Power Supply	5-16 VDC, Linear supply recommended	
Current Requirements	85mA AVG, 116mA PEAK	85mA AVG, 132mA PEAK
Operating Temperature	-40° to 150° F (-40° to 65° C)	
Operating Humidity	5% to 95% relative humidity non-condensing	
Transmit Frequency	13.56MHz	
Cable Distance	Wiegand/Clock-and-Data Interface 500ft (150m) (22AWG)	Wiegand/Clock-and-Data Interface 500ft (150m) (22AWG), RS232 50ft (15m), RS485 4000ft (1220m), USB 16ft (4m), UART 25 ft (7 m)
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 •14443A - read only; MIFARE® and DESFire (serial number) • US Government PIV • FeliCa IDm (Transit Readers Only)	•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 •14443A - read only; MIFARE® and DESFire (serial number) • US Government PIV
Certifications	UL 294/cUL, FCC Certification, Canada Certification, CE Mark (EU), Austrailia C-Tick, New Zealand, Taiwan, Korea, Japan, China, RoHS Compliant (EU and China) Pending: IP54	UL 294/cUL, FCC Certification, Canada Certification, CE Mark (EU), Austrailia C-Tick, New Zealand, Taiwan, Korea, Japan, China, RoHS Compliant (EU and China) Pending: IP54
Housing Material	UL94 Polycarbonate	UL94 Polycarbonate
Warranty	Warrantied against defects in materials and workmanship for life. (See complete warranty policy for details.)	Warrantied against defects in materials and workmanship for life. (See complete warranty policy for details.(

*Consult How to Order Guide for specific ordering instructions.
**Dependent upon installation conditions.
*** Add 40mA current draw for USB expansion module. Add 10mA current draw for RS232, RS485 and UART expansion modules.

http://www.asi.ind.in

ACCESS experience.

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