

# bioCLASS™



**RWKL550**



**RWKLB575**



**BIO500**

Using 13.56 MHz contactless smart card technology, these *iCLASS* products provide users with new options for supporting multi-authentication of identity. Combine a contactless card presentation with a fingerprint biometric. Or, use a personal identification number (PIN) number along with a contactless card presentation.

- The *iCLASS* **RWKL550** read/write contactless smart card reader with keypad and LCD display
- The *bioCLASS* **RWKLB575** read/write contactless smart card reader with keypad, LCD display, and fingerprint biometric verification
- The *bioCLASS* **BIO500** fingerprint biometric verification module addition that can be used to field upgrade existing keypad readers with LCD display (RWKL550)

The *bioCLASS* products provide three levels of fingerprint verification. During the enrollment process, the RWKLB575 is connected to your PC via a USB port. The software will guide the user to place their finger on the sensor. The fingerprint template is collected at the unit and immediately transferred to the card. During this enrollment process, the fingerprint template is stored **ONLY** on the card; it is never transmitted to an external host. During verification at the door, the LCD graphical display will assist the user with instructions about finger placement on the biometric sensor.

## Benefits of these new products include:

- ▶ **The products' unique modular design provides a high level of flexibility.**
  - The finger pad at the bottom center of the biometric unit offers ease-of-use for either right or left-handed individuals.
  - The location of the finger pad is compliant with ADA standards.
  - Field upgrade from the keypad with LCD display (RWKL550) to a biometric solution cost-effectively without downtime.
- ▶ **LCD display provides feedback on user finger placement and defines custom menu keys.**
- ▶ **Fingerprint templates are stored on the *iCLASS* card and not in the reader. This results in:**
  - Increased security
  - Faster throughput
  - Easier system management
  - Lower costs for the biometric reader
  - Reduced concerns over individual privacy
- ▶ **Choose the level of security that meets your needs.**
  - Card and PIN
  - Card and fingerprint
  - Card, PIN, and fingerprint

# *iCLASS*® by

**Smart • Powerful • Trusted**



## Features

### Data Output Formats

The keypad reader reads standard proximity format data from HID *iCLASS*® cards, and will output data as encoded. When reading MIFARE® cards, the keypad reader can be configured to output 26-bit, 32-bit, 34-bit, 37-bit, 40-bit, or 56-bit Wiegand formats based on the card serial number.

Wiegand keypad data format can be configured for transmission of individual key presses as ASCII encoded Hex digits, or for buffering and transmission of the PIN as a card number in SIA 26-bit format with a configurable facility code.

Additionally, the RWKL550 and RWKLB575 offer a USB and RS-485 connection. Using the ISO 7816 protocol, the standard for contact smart card applications, the RWKL550 and RWKLB575 allow connection to a PC or microcontroller to support read/write applications.

### Keypad

Offers 12 discrete switches with metal keycaps. Raised tactile mark on the fifth key for visually impaired users. Configurable audio feedback. Backlit numbers in bezel overlay, above each key. Lighting is configurable: Always On, Triggered by Card Read, or Triggered by Key Press.

### User Function Keys

Four programmable user function keys with metal keycaps. User function keys are available with factory default settings or can be customized. In either case, user function keys are easily defined in the graphical LCD display.

### Security

64-bit authentication keys are extremely secure. Readers and cards require matching keys to function. All RF data transmission between the card and keypad reader is encrypted, using a secure algorithm. The key management system reduces the risk of compromised or duplicated cards.

Cards and keypad readers with site-specific keys are optionally available from the factory. Alternatively, the CP575 Card Programmer can be used to create site-specific keys. The programmer also allows users to create a keypad reader configuration card, which is used to re-key cards and keypad readers on site.

In addition to the card security, *bioCLASS* offers additional user verification. If you require specific information, please consult the factory.

### Programming/Configuration

All cards are shipped with unique diversified keys; keypad readers are shipped with compatible keys. All keys are derived from the HID Standard key. While cards and keypad readers with Standard keys are interchangeable, the keys are highly secure. Further enhance security by ordering with *iCLASS* Elite custom keys.

### Audiovisual Indication

Audio transducer provides configurable tone sequences to signify access granted, access denied, power up, and configuration card read. A light bar provides a clear visual status indication in red, green, or amber. All units contain an LED to light the sensor area if the biometric option is included.

### Graphical Display

The backlit graphical LCD display offers a 60 x 18 mm viewing area, 120 x 32 resolution. It is factory preset to provide written instructions to the user. Fully customizable, the display also describes the function of the user function keys.

### Open Collector Output RWKL550 and RWKLB575

Normally open logic output, controlled via serial port. Switches up to 50mA at 12 VDC. Use interposing relay for larger loads. Configurable to latch momentarily upon successful local verification of PIN stored on the card.

### Mounting

Mounting plate attaches to U.S./EU/ Asian back box, 52-60 mm screw hole spacing (vertical or horizontal). Keypad/LCD reader housing latches onto mounting plate, secured with a screw. Mounts on metal with minimal read range impact.

### BIO Mounting

The RWKLB575 and BIO500 include a longer mounting plate. When using the BIO500 to field upgrade an existing RWKL550, you must remove the original mounting plate and replace it with the longer mounting plate.

### Indoor Design

Rugged, weatherized polycarbonate enclosure provides reliable performance and resistance to vandalism. (Please note that these products are not suitable for outdoor use.)

### Enrollment

Enrollment software included with the CP575 unit is required to write the biometric template to the cards. The template never enters the PC – it is collected by the reader and written to the *iCLASS* card all in one simple process. To alleviate privacy and database management concerns, the biometric template is stored on the *iCLASS* card rather than in the unit.

### *iCLASS* Credential Compatibility

The RWKL550 and RWKLB575 are compatible with all *iCLASS* credentials. The units can read or read/write to credentials compatible with several ISO standards including:

- 15693 - read/write; 2k bit (256 Byte) and 16k bit (2k Byte) *iCLASS* credentials
- 14443A - read only; MIFARE® Standard (serial number), Ultralight, or DESFire™
- 14443B - read/write; 16k bit (2k Bytes) *iCLASS* credentials

Note: 16k bit (2k Bytes) cards are required for biometric option.

### Warranty

Warranted against defects in materials and workmanship for one year. (See HID's Sales Policy for complete warranty details.)

### Base Part Numbers:

|          |   |      |
|----------|---|------|
| RWKL550  | Read/write keypad with LCD display  | 6171 |
| RWKLB575 | Read/write keypad with LCD display and fingerprint biometric verification | 6181 |
| BIO500   | <i>bioCLASS</i> fingerprint biometric module addition                     | 6190 |
| CP575    | <i>bioCLASS</i> enrollment reader/writer with software                    | 6251 |

### Options:

Color – Black  
Key Management - Standard or High Security  
Selectable Output Type (for MIFARE cards)  
Termination - removable connector with miniature screw terminals  
Programmable LED/Beeper/LCD/menu key operation  
Accessory - Security Tool: 04-0001-03  
\*Check factory for availability

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