





Put your trust in the name you know

For more than 90 years Schlage has been providing innovative security solutions for schools, hospitals, government facilities and a host of other commercial buildings. Today, Schlage is at the forefront of cutting edge technology with electronic locking, wireless access, biometric and smart card solutions.

With a wide range of products, functions and styles, Schlage has what you need no matter how demanding your application. And we stand behind every product we make with an outstanding service organization that will be with you every step of the way. It's our commitment to design, performance and technology that ensures you can stand behind our products too.

Reliable security with confidence

Schlage biometrics specializes in the development, marketing and service of biometric devices for access control and workforce management applications.

Located in the heart of California's Silicon Valley, Schlage biometrics offers biometric technology as a secure alternative to easily lost or compromised ID cards and PIN numbers. The technology uses hand geometry to verify a person's true identity.

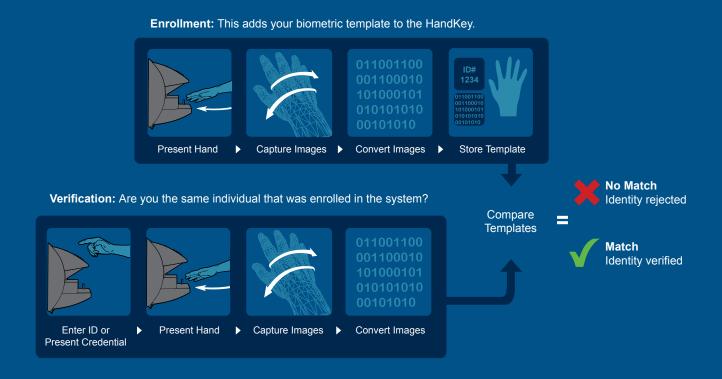
When you choose a Schlage biometrics product, you can be sure that you have done the job right the first time. After all, our products are the most reliable and dependable on the market today. Our HandKeys® are easy to install and simple to maintain. That means fewer service issues for you and low total cost of ownership.



Robust, field proven biometric technologies

Biometric products identify people by analyzing their unique human characteristics. Schlage Hand Geometry readers use field-proven technologies to provide increased security at any door and to ensure that the right person is at the right place at the right time. These technologies are frequently used in universities, data centers, day care centers, airports, health care facilities and government buildings.

Biometric verification - how it works.



Hand Geometry

The Hand Geometry HandKey product measures the size and shape of a user's hand including length, width, thickness and surface area to verify the person's identity. In conjunction with a PIN number or swipe of a card, the enrolled individual can gain access to the facility. The HandKey does not read fingerprints or palm prints.

How to verify

- Enter ID
- Place hand on blue hand outline on platen (hand placement surface)
- Camera captures the digital image of the hand
- Score is displayed upon a successful verification only
- The lower the score the closer the presented hand is to the stored template



Don't compromise on security The safety and security of buildings and assets are things that we take very seriously. That's why every Schlage biometric reader is manufactured to stringent specifications and undergoes intensive quality testing. As a result, you get a dependable product that is easier to maintain and provides exceptionally reliable security. Hand Geometry - Page 6

Top 10 reasons to select Hand Geometry

Field proven reliability

1. Hundreds of thousands of HandKeys are installed all over the world in diverse applications providing millions of error free transactions every day

Convenience and cost savings

- 2. Incredibly fast installation & intuitive enrollment increases user convenience
- 3. Verification in less than 1 second makes it ideal for high throughput applications
- 4. High product quality + low maintenance costs = Low total cost of ownership
- 5. Eliminate the worry of lost, stolen or unauthorized transfer of ID cards plus the cost of purchasing and maintaining these cards

Eliminate privacy concerns

6. Hand Geometry technology is well accepted by end users as there are NO fingerprints or palm prints taken and the user does not leave behind any trace of their biometric data

Amazing versatility

- 7. HandKeys can be used as standalone systems to protect critical access points that can be easily integrated into virtually every new or existing access control system in the market today
- 8. Ability to customize user specific security levels, time zones, holidays and languages based on your needs
- 9. Optional access control template management software allows the HandKeys to form a system that communicates alarms and transactions in real time, provides activity reports, allows supervised on-site or remote user enrollment and expiring privileges for temporary access
- 10. Environmental enclosures and integrated heater units make the HandKey an ideal solution for outdoor usage



HandKey II



High security, reliability and performance

Our HandKey II product is ideal for applications where consistent and dependable security is of prime importance. The product is easy to maintain, and provides an ideal mix of convenience, security and peace of mind.

In addition to all Hand Geometry benefits, the HandKey II offers:

- Convenience of multiple credential options such as proximity, magnetic stripe, barcode, iCLASS® and MIFARE®
- Field installable Ethernet module
- Outdoor enclosure options that make the HandKey II an ideal solution for outdoor usage
- Field upgradable and expandable memory options from 512 to 240,000 users for scalable security that grows with your needs
- Three user-definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems
- Ability to write the industry's most compact biometric template on a card instead of in a database results in higher security & unlimited user capacity
- Specially formulated antimicrobial coating with silver ions on the platen to inhibit the growth of bacteria, mold and mildew to mitigate hygiene concerns. The coating is safe and lasts for the life of the product
- · Blue hand outline on the platen facilitates easy enrollment and reduces error rates during verification

^{*} refer to technical specification on page 14

HandKey ID3D-R and HandKey ID3D-RW



Nothing is tougher!

At Schlage biometrics we know that every product you specify has to stand up to constant use and abuse. The all-metal HandKeys ID3D-R and ID3D-RW are able to withstand the rigors of daily use and abuse without fail.

In addition to all Hand Geometry benefits, the HandKeys ID3D-R and ID3D-RW offer:

- · All-metal housing for increased durability and toughness
- Left handed configuration for drive-through applications and entrance gates
- Recess-mount option for reduced obstruction at high traffic areas
- Convenience of multiple credential options such as magnetic stripe, bar code
- Integrated unit with heater and enclosure makes ID3D-RW ideal for outdoor environments
- Two user definable outputs to connect to auxiliary devices such as audible or silent alarms, door locks or lighting systems

^{*} refer to technical specification on page 14

A biometric that works indoors & outdoors

Schlage biometrics provides various options to protect your HandKeys from the elements. Three different, proven solutions are available to ensure your HandKeys keep performing regardless of your environment.



ID₃D-RW

Biometric HandKey with standard 256 user memory, integrated heater + enclosure

Ideally suited for outdoor environments, the ID3D-RW is constructed of heavy-gauge zinc-coated steel. It features a sealed keypad, and a heated interior. This is a fully integrated unit and comes complete with a HandKey and an internal heater.



FX enclosure

Biometric HandKey enclosure

Constructed from high impact UV resistant polycarbonate material, the FX enclosure provides a degree of protection against dusty, dirty, or rainy environments. This enclosure has been designed so that it can be added to an existing installation. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.



TX enclosure

Biometric HandKey enclosure

The TX Enclosure provides a higher degree of protection against dusty, dirty, or rainy environments. When used with an integrated heater option (INT-HTR), it provides a comfortable heated platen against a cold climate.

	ID ₃ D-RW	FX Enclosure	TX Enclosure
Temperature Range	-35F to 120F/-37C to 49C	-20F to 120F/-29C to 49C	-45F to 120F/-43C to 49C
Dimensions HxWxD	11.75 in. x 8.00 in. x 8.75 in. 29.9 cm x 20.3 cm x 22.2 cm	14.75 in. x 12.00 in. x 10.50 in 37.5 cm x 30.5 cm x 26.7 cm	23.00 in x 14.00 in x 11.25 in 58.4 cm x 35.6 cm x 28.6 cm
Gross Weight	23.0 lbs / 10.4 kg	7.3 lbs / 3.3 kg	45.0 lbs / 20.4 kg
HandKey models	ID3D-RW	HK-2-F3	HK-2-F3
Heater	Standard integrated heater	Factory installed option only, Model No. INT-HTR	Factory installed option only, Model No. INT-HTR

Models, options & accessories

Schlage biometrics offers a number of options and accessories to help you create a solution to meet your specific needs.

Base Models	HK-2-F3	ID ₃ D-R / ID ₃ D-RW
Card Readers	Prox: Externally top mounted HID prox reader. Factory option only HID iCLASS®: iCLASS reader, Factory option only SC-100: MIFARE® reader, Factory option only CR-2: Mag stripe wall mount card reader BC-100: Bar code reader, wall mount swipe	Prox: NA iCLASS: NA SC-100: NA CR-2: Mag stripe wall mount card reader CR-2L: Mag stripe, top mount swipe card reader CR-3L: Mag stripe, side mount swipe card reader BC-100: Bar code reader, wall mount swipe
Memory	EM-801-F3: Field upgradeable memory expansion up to 9,728 users EM-803-F3: Field upgradeable memory expansion up to 32,512 users EM-813-F3: Memory expansion up to 64,768 users EM-823-F3: Memory expansion up to 129,536 users EM-833-F3: Memory expansion up to 194,304 users EM-843-F3: Memory expansion up to 259,072 users	EM-600: Memory expansion up to 3,328 users EM-602: Memory expansion up to 9,728 users EM-604: Memory expansion up to 27,904 users
Communication	EN-200: Field upgradeable Ethernet communication module 10baseT MD-500: Internal Dial-up modem	EN-100: Ethernet communication module 10baseT
Power Options	PS-110: Power supply, 120VAC to 13.5 VDC PS-220: Power supply, 220VAC to 13.5 VDC BB-200: Optional battery backup	IS-400: Power supply, 120VAC to 13.5 VDC PS-220: NA BB-100: Optional battery backup
Mounting	TM-100: Table top secure mount for flat surfaces	TM-100: NA WM-200: Recessed wall mount kit WM-201: Surface wall mount kit
Left Hand Option	NA	LH-100: Left hand version of ID3D-R LH-100RW: Left hand version of ID3D-RW
Network Accessories	DC-102: Data converter for 4 wire system, RS-232 to RS-422 with 120V, 60Hz power supply DC-102 with 220V, 50Hz power supply DC-104: Data converter for 2 or 4 wire systems, RS232 to RS485/RS 422 with 120V, 60Hz power supply DC-104 with 220V, 50Hz power supply	DC-102: Data converter for 4 wire system, RS-232 to RS-422 with 120V, 60Hz power supply DC-102 with 220V, 50Hz power supply DC-104: Data converter for 2 or 4 wire systems, RS232 to RS485/RS 422 with 120V, 60Hz power supply DC-104 with 220V, 50Hz power supply



Applications

The versatility and flexibility of the HandKey lends itself to diverse indoor and outdoor applications.

Critical infrastructure

- Transportation hubs at airports and shipping ports to grant access to authorized personnel to aircraft/ship operations, baggage handling and other sensitive areas
- Data centers HandKeys accommodate a large number of users, offer a high level of security, are easy to use, provide for remote enrollment & eliminate the need to carry a card
- Construction facilities highly robust and user friendly HandKeys operate well in nearly all environmental conditions; unaffected by dirt on the hands, poor lighting conditions, or the worn fingerprints endemic of manual laborers
- Utilities installed on the front doors of the majority of US nuclear power plants. They are also installed at various government research facilities
- Prisons monitor all comings and goings at prisons and eliminate the need for posting guards at all access sites and supplying them with keys
- Military installations protecting US troops & assets worldwide by providing reliable access to the appropriate personnel

Healthcare facilities

• Pharmacy, surgery, long term care, and research facilities – increase security by providing access to secure areas only to authorized personnel

Financial institutions

• Safe deposit vaults - enhanced security to gain access to safe deposit boxes without the need for personnel to accompany the customer in and out of the vault



Education

- Residence halls verify students to ensure that only authorized students gain access
- Recreational facilities minimize people's ability to transfer IDs and eliminate the need for keys / cards
- Dining halls limit access to students who have paid for the meal plan
- Computer labs provide access only to authorized personnel seeking access to sensitive equipment and information

Hospitality

- Lodging access to high security, high valued openings such as data records and hotel supplies areas
- Entertainment access to high security, high valued opening in casinos, stadiums and theme parks

Commercial buildings

- Specialized high asset areas access to high security, high valued areas such as IT, HVAC, conference rooms in addition to front doors
- Corporate campuses provide high security to a variety of restricted areas like management offices and expensive high tech equipment rooms

Specifications for the HandKey Series

Base Models	HK-2-F3	ID ₃ D-R / ID ₃ D-RW	
Description	HandKey with base memory for 512 users	HandKey with base memory for 256 users	
Verification Time	≤ 1 second for comparison to reference	≤ 1 second for comparison to reference	
ID Number Length	1 – 10 digits	1 – 10 digits	
Duress Code	1 leading digit, user definable	1 leading digit, user definable	
Communication	RS-232: Baud rate 300 bps to 28,800 bps RS-422: Baud rate 300 bps to 28,800 bps RS-485: Baud rate 300 bps to 28,800 bps Optional Modem: Baud rate 300 bps to 14,400 bps Optional Ethernet: 10 Base T	RS-232 (Printer output only): Baud rate 300 bps to 19,200 bps RS-422: Baud rate 300 bps to 19,200 bps RS-485: Baud rate 300 bps to 19,200 bps Optional Ethernet: 10 Base T	
Template Size	9 bytes	9 bytes	
User Memory	512 users expandable to 259, 072 users	256 users expandable to 27,904 users	
Inputs	Standard: 26 bit, 9 bit ID Wiegand Optional: Mag stripe, bar code, smart card HandKey input: Request to Exit, Door switch input, 2 auxiliary inputs	Standard: 26 bit, 9 bit ID Wiegand Optional: Mag stripe, bar code HandKey input: Request to Exit, Door switch input, 1 Auxiliary inputs	
Outputs	Door control: Lock output Card reader emulation mode: Wiegand, mag stripe, bar code 1 programmable auxiliary Outputs to peripheral devices: Audible or silent alarms, door locks, lighting systems	Door control: Lock output Card reader emulation mode: Wiegand, mag stripe, bar code 1 programmable auxiliary Outputs to peripheral devices: Audible or silent alarms, door locks, lighting systems	
Event Monitoring	Tamper: HandKey opened or removed ID refused: User not verified after user definable number of tries exceeded Duress: User entered duress code digit Power failure: HandKey switched to optional battery power	Tamper: HandKey opened or removed ID refused: User not verified after user definable number of tries exceeded Duress: User entered duress code digit Power failure: HandKey switched to optional battery power	
Programmable HandKey Commands	 Add/remove users Set global operating thresholds Set individual user data (authority or threshold levels, time zones) Transmit data from Master to Remote Data received by Master from Remote Transmit/receive data from optional software Check status of door (Tamper, Door monitor switch) Time zones – 62 total (2 fixed, 60 programmable) Set language Set date format, date and time Edit holidays 	 Add/remove users Set global operating thresholds Set individual user data (authority or threshold levels, time zones) Transmit data from Master to Remote Data received by Master from Remote Transmit/receive data from optional software Check status of door (Tamper, Door monitor switch) Time zones – 62 total (2 fixed, 60 programmable) Set language Set date format, date and time Edit holidays 	
Antimicrobial	Available on Platten	NA	
Blue Hand Outline	Available on Platten	NA	
Dimensions HxWxD	11.65 in. x 8.85 in x 8.55 in 29.6 cm x 22.5 cm x 21.7 cm	8.30 in x 6.50 in. x 7.17 in. (ID3D-R Dimensions) 21.3 cm x 16.5 cm x 18.7 cm (ID3D-R Dimensions)	
Power Requirements	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)	12 to 24 VDC or 12 to 24 VAC 50-60 Hz 7 Watts (without options)	
Weight	5.3 lbs. (2.4kgs.) (Without battery back-up or wall plate)	7.2 lbs. (3.3 kgs.) (Without back plate)	
Temperature	Operating: 0 deg C to +45 deg C / 32 deg F to 113 deg F Non-Operating (Storage): -10 deg C to +60 deg C / 14 def F to 140 deg F	Operating: 0 deg C to +45 deg C / 32 deg F to 113 deg F Non-Operating (Storage): -10 deg C to +60 deg C / 14 deg F to 140 deg F	
Relative Humidity	Operating: 20% to 80% RH Non-condensing Non-operating (Storage): 5% to 85% RH Non-condensing	Operating: 20% to 80% RH Non-condensing Non-operating (Storage): 5% to 85% RH Non-condensing	

Additional Schlage solutions



Workforce Management

Schlage HandPunch terminals utilize Hand Geometry technology to automate Workforce Management systems, control labor costs, eliminate costly badges and cards, reduce compliance risk and stop time fraud.

The HandPunch is a trusted and reliable solution used in a variety of Workforce Management applications worldwide.

Hospitality

• Education

Government

• Manufacturing

• Quick serve restaurants

Construction

Grocery

• Healthcare

• Hospitals

Retail stores

Order processing

Phone: 877-671-7011, Option 1, Option 8

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Technical support

Phone: 877-671-7011, Option 2, Option 8

 $Readers_Credentials_Biometrics_TechProdSupport@irco.com$



Ingersoll Rand (NYSE:IR) advances the quality of life by creating and sustaining safe, comfortable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Schlage®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; secure homes and commercial properties; and increase industrial productivity and efficiency. Schlage is the leader in security devices, trusted for 90 years, spanning both the commercial and residential markets. Ingersoll Rand is a \$14 billion global business committed to a world of sustainable progress and enduring results.











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