



OmniClass™ 2.0

Contactless Smart Card Readers

OmniClass from Honeywell is a range of 13.56 MHz contactless secure smart card readers that offers superb reliability, consistent read range and ease of installation. They are available in several sizes and each OmniClass reader incorporates smart card technology allowing the user to support biometric profiles and multiple applications on each card simultaneously.

OmniClass can retro-fit any Wiegand output reader, including standard HID® or Honeywell proximity readers. Smart card technology is ideally suited for access control, logical (PC) access, storage of biometric templates, parking, secure ID's with embedded tamper-proof digital photos, ePurse and many other applications requiring secure and reliable read/write cards.

Multi Technology Functionality

To make it easier for customers to transition to a smart card system from a 125 kHz prox card system, the range includes options that can support HID Prox, EM4102 and AWID proximity technologies. These multi-technology readers work with all technologies simultaneously and will allow the user to transition to smart cards over time while incorporating the use of multiple card technologies within a single building or across multiple facilities. In addition, the OmniClass reader range provides enhanced security through mutual authentication and data encryption when using the smart card credential based on the encrypted contactless communication. Whether reading proximity, OmniClass or multitechnology cards, identical user identification data formats are sent to the panel, keeping the data on the card transparent to the user.

FEATURES

- Supports multiple ISO standards: Allows OmniClass 2.0 to read most ISO standard smart card.
- Custom MIFARE Classic and MIFARE DESFire EV1 optionally available
- High-Security: Encrypted data exchange available between card and reader and between reader and host reduces the risk of compromised data and duplicated cards
- Available in mullion, switch plate and wall-mount sizes
- ADA compliant built-in audible beeper
- Host LED control (programmable)
- Control cards (optional) can be used to manage security keys and change the operating characteristics of the reader
- Hidden mounting screws deter vandalism
- Potted for superior weather resistance
- Wiegand output
- Reads HID Prox, EM4102 and AWID and OmniClass credentials (Multi technology models only)
- Ideal solution for card technology transition (Multi technology models only)

* Note about MIFARE Classic and MIFARE DESFire EV1 technologies.

The OmniClass 2.0 reader range is by default compatible with HID SE for MIFARE and HID SE for DESFire EV1 credentials.

Optionally it is possible to configure the OmniClass 2.0 readers with custom user defined keys MIFARE Classic and MIFARE DESFire EV1.

The OmniClass reader range benefits include:

Suitable for integrated access control systems: A fast response time between two consecutive card reads makes it suitable for integrated access control and intrusion systems where a triple swipe action at the reader is needed to arm the system.

More Open: OmniClass 2.0 readers support global 13.56 MHz smart card technology standards including OmniClass, OmniClass 2.0, iCLASS®, iCLASS SR™/SE®, iCLASS® Seos™ as well as MIFARE Classic* and MIFARE DESFire EV1*. Optionally 125 kHz Prox technology is supported including HID® Prox, EM4102 and AWID.

More Secure: Card numbers for OmniClass/iClass credentials are safely stored and transmitted using 64-bit authentication keys encryption, which is suitable for most access control applications. A higher level of security can be achieved using the AES encrypted iClass SE/iCLASS Seos and MIFARE DESFire EV1 credentials. Additional keypad versions are available for dual authentication.

Convenience: Card numbers are printed on the OmniClass cards/credentials. MIFARE Card Serial Numbers (CSN) also supported. Interoperability between vendors and applications is possible via the smart card's accessible memory.

Easy to install: Two piece installation, only mounting plate and reader. Wiegand output for new and retrofit installations, indoor and outdoor.

Simple transition from 125 kHz PROX to OmniClass smart cards: Multi technology OmniClass readers make it easy for a HID Prox, EM4102 or AWID card based technology system to transition to an OmniClass smart card based solution.

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Contactless Smart Card Readers

SPECIFICATIONS



Part Number	OM15BHOND OM15BHOND	OM30BHOND OM30BHOND	OM40BHOND OM40BHOND	OM45BHOND OM45BHOND	OM55BHOND OM55BHOND
Mounting	Large Mullion Size mounted door installations or any	Mullion Size suited for mullion-mounted door installations or any flat surface	Wall Switch Size designed to mount and cover single US gang switch boxes primarily used in the Americas and includes a slotted mounting plate for European and Asian back box spacing	EU/APAC Square Size 83.8 mm (3.3") square reader is designed to mount to and cover standard European and Asian back boxes	Wall Switch Size designed to mount and cover single gang switch boxes primarily used in the Americas and includes a slotted mounting plate for European and Asian back box spacing
Keypad	No				Yes
Housing Colour	Black				
Dimensions (W x H x D)	4.8 x 15.3 x 2.3 cm 1.9" x 6.0" x 0.9"	4.8 x 10.3 x 2.3 cm 1.9" x 4.1" x 0.9"	8.4 x 12.2 x 2.4 cm 3.3" x 4.8" x 1.0"	8.4 x 8.4 x 2.3 cm 3.3" x 3.3" x 0.9"	8.5 x 12.2 x 2.8 cm 3.3" x 4.8" x 1.1"
Typical Read Ranges* OmniClass/iCLASS credential 2k/16k Smart (OKP0.../ OKP2...) Class SE credential Key/tag Smart (PXKEYH.../OKS...)	7.6 cm/3.0" 7.6 cm/3.0" 3.2 cm/1.25"	7.6 cm/3.0" 7.6 cm/3.0" 3.2 cm/1.25"	11.4 cm/4.5" 11.4 cm/4.5" 4.4 cm/1.75"	8.9 cm/3.5" 8.9 cm/3.5" 5.1 cm/2.0"	12.7 cm/5.0" 12.7 cm/5.0" 4.4 cm/1.75"
MIFARE/DESFire credential SE for MIFARE Classic ISO card SE for MIFARE Classic Key/tag SE for DESFire EV1 ISO card	5.7 cm/2.25" 1.3 cm/0.5" 5.1 cm/2.0"	5.7 cm/2.25" 1.3 cm/0.5" 5.1 cm/2.0"	8.9 cm/3.5" 3.8 cm/1.5" 8.3 cm/3.25"	7.6 cm/3.0" 3.8 cm/1.5" 5.1 cm/2.0"	11.4 cm/4.5" 3.8 cm/1.5" 5.7 cm/2.25"
Smart Card Compatibility	15693: Reads iClass/OmniClass credentials, card serial number 14443B: Reads iClass/OmniClass credentials (secure)				
Additional ISO support	14443A 1-3: Reads NXP MIFARE Classic credentials, Sector 14443A 1-4: Reads NXP MIFARE DESFire EV1 credentials, AES Encrypted files 14443A: Reads NXP MIFARE Classic, DESFire EV1 credentials, Card Serial Number (CSN or UID)				
Key Length	iClass/OmniClass 64 bit encryption iClass SE/iCLASS Seos 128 bit AES Encryption SE for MIFARE Classic/SE for DESFire EV1 128 bit AES Encryption				
Data Encryption	Available between card and reader (OmniClass and iClass) Additionally on credential (SE for MIFARE Classic and MIFARE DESFire EV1)				
Crypto Processor Hardware Common Criteria Rating	EAL5+				
Regulatory Approvals	UL294/cUL (US), FCC Certification (US), IC (Canada), CE (EU), C-tick (Australia, New Zealand), SRRC (China), KC (Korea), NCC (Taiwan), iDA (Singapore)				
Operating Temperature	-31° to 150° F (-35° to 65° C)				
Operating Humidity	5 to 95% relative humidity (non-condensing)				
Operating Voltage Range	5 - 16 VDC				
Current Normal standby current Maximum average current	60mA 90mA	60mA 90mA	65mA 90mA	65mA 90mA	85mA 100mA
Termination	9 wire 45 cm Pigtail (D-version) or 9 wire terminal block (DT-version)				
Tamper Output	Available (Optical sensor)				
Hold Wire input	Yes				
Panel Interfaces	(all built-in) Wiegand				
IP Rating	IP55				
Warranty**	Limited Lifetime				

*Typical read range achieved in air. Different types of metal will cause some degradation.

**See Honeywell Security Group's Sales Policy for complete details.

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SPECIFICATIONS

SMART CARD AND 125 KHZ PROX MULTI TECHNOLOGY READERS



Part Number	OM16BHOND OM16BHOND	OM31BHOND OM31BHOND	OM41BHOND OM41BHOND	OM46BHOND OM46BHOND	OM56BHOND OM56BHOND
Mounting	Large Mullion Size suited for mullion-mounted door installations or any flat surface	Mullion Size suited for mullion-mounted door installations or any flat surface	Wall Switch Size designed to mount and cover single US gang switch boxes primarily used in the Americas and includes a slotted mounting plate for European and Asian back box spacing	EU/APAC Square Size 83.8 mm (3.3") square reader is designed to mount to and cover standard European and Asian back boxes	Wall Switch Size designed to mount and cover single gang switch boxes primarily used in the Americas and includes a slotted mounting plate for European and Asian back box spacing
Keypad	No				Yes
Housing Colour	Black				
Dimensions (W x H x D)	4.8 x 15.3 x 2.3 cm 1.9"x 6.0" x 0.9"	4.8 x 10.3 x 2.3 cm 1.9" x 4.1" x 0.9"	8.4 x 12.2 x 2.4 cm 3.3" x 4.8" x 1.0"	8.4 x 8.4 x 2.3 cm 3.3" x 3.3" x 0.9"	8.5 x 12.2 x 2.8 cm 3.3" x 4.8" x 1.1"
Typical Read Ranges* OmniClass/iCLASS credential 2k/16k Smart (OKP0.../ OKP2...) Class SE credential Key/tag Smart (PXKEYH.../OKS...)	6.4 cm/2.5" 6.4 cm/2.5" 2.5 cm/1.0"	6.4 cm/2.5" 6.4 cm/2.5" 2.5 cm/1.0"	11.4 cm/4.5" 11.4 cm/4.5" 5.7 cm/2.25"	8.3 cm/3.25" 8.3 cm/3.25" 3.8 cm/1.5"	11.4 cm / 4.5" 11.4 cm / 4.5" 5.7 cm / 2.25"
MIFARE/DESFire credential SE for MIFARE Classic ISO card SE for MIFARE Classic Key/tag SE for DESFire EV1 ISO card	5.7 cm/2.25" 1.3 cm/0.5" 2.5 cm/1.0"	5.7 cm/2.25" 1.3 cm/0.5" 2.5 cm/1.0"	10.2 cm/4.0" 3.8 cm/1.5" 5.1 cm/2.0"	5.7 cm/2.25" 2.5 cm/1.0" 5.1 cm/2.0"	10.2 cm / 4.0" 3.8 cm / 1.5" 5.1 cm / 2.0"
Proximity credential (125kHz) HID Prox/AWID ISO Card HID Prox/AWID Key/tag EM4102 ISO Card	5.1 cm/2.0" 2.5 cm/1.0" 8.9 cm/3.5"	5.1 cm/2.0" 2.5 cm/1.0" 8.9 cm/3.5"	6.4 cm/2.5" 3.8 cm/1.5" 10.2 cm/4.0"	5.7 cm/2.25" 3.2 cm/1.25" 5.1 cm/2.0"	6.4 cm / 2.5" 3.8 cm / 1.5" 7.6 cm / 3.0"
Smart Card Compatibility	15693: Reads iClass/OmniClass credentials, card serial number 14443B: Reads iClass/OmniClass credentials (secure)				
Additional ISO support	14443A 1-3: Reads NXP MIFARE Classic credentials, Sector 14443A 1-4: Reads NXP MIFARE DESFire EV1 credentials, AES Encrypted files 14443A: Reads NXP MIFARE Classic, DESFire EV1 credentials, Card Serial Number (CSN or UID)				
125 kHz proximity compatibility	HID Prox, AWID and EM4102				
Key Length	iClass/OmniClass 64 bit encryption iClass SE/iCLASS Seos 128 bit AES Encryption SE for MIFARE Classic/SE for DESFire EV1 128 bit AES Encryption				
Data Encryption	Available between card and reader (OmniClass and iClass) Additionally on credential (SE for MIFARE Classic and MIFARE DESFire EV1)				
Crypto Processor Hardware Common Criteria Rating	EAL5+				
Regulatory Approvals	UL294/cUL (US), FCC Certification (US), IC (Canada), CE (EU), C-tick (Australia, New Zealand), SRRC (China), KC (Korea), NCC (Taiwan), iDA (Singapore)				
Operating Temperature	-31° to 150° F (-35° to 65° C)				
Operating Humidity	5 to 95% relative humidity (non-condensing)				
Operating Voltage Range	5 - 16 VDC				
Current Normal standby current Maximum average current	75mA 100mA	75mA 100mA	85mA 100mA	85mA 100mA	95mA 105mA
Termination	9 wire 45 cm Pigtail (D-version) or 9 wire terminal block (DT-version)				
Tamper Output	Available (Optical sensor)				
Hold Wire input	Yes				
Panel Interfaces	(all built-in) Wiegand				
IP Rating	IP55				
Warranty**	Limited Lifetime				

* Typical read range achieved in air. Different types of metal will cause some degradation.

** See Honeywell Security Group's Sales Policy for complete details.

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ORDERING

Readers

- OM15BHOND** OmniClass 2.0 Long Mullion Mount Reader, Black Bezel, 45 cm pigtail
- OM30BHOND** OmniClass 2.0 Mullion Mount Reader, Black Bezel, 45 cm pigtail
- OM40BHOND** OmniClass 2.0 Switch Plate, Single-gang (US) Reader, Black Bezel, 45 cm pigtail
- OM45BHOND** OmniClass 2.0 Switch Plate, Single-gang (UK/EU/Asian) Reader, Black Bezel, 45 cm pigtail
- OM55BHOND** OmniClass 2.0 Reader with Keypad, Black Bezel, 45 cm pigtail
- OM15BHONDT** OmniClass 2.0 Long Mullion Mount Reader, Black Bezel, terminal strip
- OM30BHONDT** OmniClass 2.0 Mullion Mount Reader, Black Bezel, terminal strip
- OM40BHONDT** OmniClass 2.0 Switch Plate, Single-gang (US) Reader, Black Bezel, terminal strip
- OM45BHONDT** OmniClass 2.0 Switch Plate, Single-gang (UK/EU/Asian) Reader, Black Bezel, terminal strip
- OM55BHONDT** OmniClass 2.0 Reader with Keypad, Black Bezel, terminal strip

OmniClass 2.0 Multi Technology Readers

- OM16BHOND** OmniClass 2.0 Multi Technology Long Mullion Mount Reader, Black Bezel, 45 cm pigtail
- OM31BHOND** OmniClass 2.0 Multi Technology Mullion Mount Reader, Black Bezel, 45 cm pigtail
- OM41BHOND** OmniClass 2.0 Multi Technology Switch Plate, Single-gang (US) Reader, Black Bezel, 45 cm pigtail
- OM46BHOND** OmniClass 2.0 Multi Technology Switch Plate, Single-gang (UK/EU/Asian) Reader, Black Bezel, 45 cm pigtail
- OM56BHOND** OmniClass 2.0 Multi Technology Reader with Keypad, Black Bezel, 45 cm pigtail
- OM16BHONDT** OmniClass 2.0 Multi Technology Long Mullion Mount Reader, Black Bezel, terminal strip
- OM31BHONDT** OmniClass 2.0 Multi Technology Mullion Mount Reader, Black Bezel, terminal strip
- OM41BHONDT** OmniClass 2.0 Multi Technology Switch Plate, Single-gang (US) Reader, Black Bezel, terminal strip
- OM46BHONDT** OmniClass 2.0 Multi Technology Switch Plate, Single-gang (UK/EU/Asian) Reader, Black Bezel, terminal strip
- OM56BHONDT** OmniClass 2.0 Multi Technology Reader with Keypad, Black Bezel, terminal strip

Credentials

Omni Series Smart Credentials

- OKPON26** OmniClass 2K PVC Card with 2 Application Areas (26-bit)
- OKPON34** OmniClass 2K PVC Card with 2 Application Areas (34-bit)
- OKP2N26** OmniClass 16K PVC Card with 16 Application Areas (26-bit)
- OKP2N34** OmniClass 16K PVC Card with 16 Application Areas (34-bit)
- OKK2N26R** OmniClass 16K Key Fob with 16 Application Areas (26-bit)
- OKK2N34R** OmniClass 16K Key Fob with 16 Application Areas (34-bit)
- OXS2N26** OmniClass 16K Adhesive tag with 16 Application Areas (26-bit)
- OXS2N34** OmniClass 16K Adhesive tag with 16 Application Areas (34-bit)

OmniClass Series Smart Credentials with Magnetic Stripe

- OKP2M26** OmniClass 16K PVC Card with Mag Stripe, 16 App Areas (26-bit)
- OKP2M34** OmniClass 16K PVC Card with Mag Stripe, 16 App Areas (34-bit)
- OKP2M00** OmniClass 16K Unprogrammed PVC Card with Mag Stripe

OmniClass Series Smart + Prox Credentials*

- OKH2N26** OmniClass 16K PVC Card with HID Prox, 16 App Areas (26-bit)
- OKH2N34** OmniClass 16K PVC Card with HID Prox, 16 App Areas (34-bit)

OmniClass Series Smart + Prox w/ Magnetic Stripe Credentials*

- OKH2M26** OmniClass 16K PVC Card with HID Prox & Mag Stripe, 16 App Areas (26-bit)
- OKH2M34** OmniClass 16K PVC Card with HID Prox & Mag Stripe, 16 App Areas (34-bit)

OmniProx Series Credentials (Multi-Tech Readers only)*

- PVC426PK** OmniProx ISO Credential 25 Card Pack (26-bit)
- PVC4PK** OmniProx ISO Credential 25 Card Pack (34-bit)
- PVC526PK** OmniProx ISO Credential with Mag Stripe 25 Card Pack (26-bit)
- PVC5PK** OmniProx ISO Credential with Mag Stripe 25 Card Pack (34-bit)
- PX426PK** OmniProx Clamshell Credential 25 Card Pack (26-bit)
- PX4PK** OmniProx Clamshell Credential 25 Card Pack (34-bit)

*Also available as special order with user specified site code and card ranges

For more information

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L/OCCSRD/D
November 2014
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Honeywell