OmniClass™ 2.0

Contactless Smart, Multi-Technology and Bluetooth® Low Energy (BLE) 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 multiple applications per physical card and optional mobile credential capability.

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.

Leveraging HID's Mobile Access™ platform, OmniClass now offers optional Bluetooth® capability allowing users to use a compatible smartphone as a credential. Readers can be ordered in either mobile-ready (ready for mobile credential use except mobile keys are not loaded) or mobile-enabled (mobile keys are loaded and enabled for use with mobile credentials) configurations.

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. Whether reading proximity, mobile, smart or multi-technology credentials, identical user identification data formats are sent to the panel, keeping the data transparent to the user.

FEATURES AND BENEFITS

Easy to Install

- Available in mini and large mullion, single gang wall-mount and single gang wall-mount with keypad form factors to fit most environments—indoor or outdoor
- Two piece installation with mounting base and reader

More Convenient

- Converge multiple credential technologies onto one reader platform with support for Prox, Smart and Mobile credentials
- Manage reader settings in the field with configuration cards or mobile app

More Secure

- Encrypted communication between credential and reader for smart and mobile credentials
- Multiple encryption layers using HID's SIO (Secure Identity Object™) and Seos™ platforms

More Open

- Supports Secure Identity Object™ (SIO) on iCLASS SE/SR, MIFARE DESFire EV1 and MIFARE Classic*
- Optional HID Prox, EM4102 and AWID prox support
- Optional HID Mobile Access support (credential on phone)

More Adaptable

- Interoperable with a growing range of technologies and form factors by using HID's platform agnostic Seos™ ecosystem

* 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.

OmniClass™ 2.0 Contactless Smart, Multi-Technology and BLE Readers
Smart Reader Technical Specifications

PART NUMBER	OM15BHOND(T)/OM17BHOND(T)	OM30BHOND(T)/OM32BHOND(T)	OM40BHOND(T)/OM42BHOND(T)	OM55BHOND(T)/OM57BHOND(T)
MOUNTING	Large mullion size suited for mullion-mounted door installations or any flat surface	Mini-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	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 COLOR	Black			
DIMENSIONS (W × H × D)	4.8 × 15.3 × 2.3 cm 1.9" × 6.0" × 0.9"	4.8 × 10.3 × 2.3 cm 1.9" × 4.1" × 0.9"	8.4 × 12.2 × 2.4 cm 3.3" × 4.8" × 1.0"	8.5 × 12.2 × 2.8 cm 3.3" × 4.8" × 1.1"

TYPICAL READ RANGES*
iCLASS CREDENTIALS
    iCLASS SEOS CREDENTIAL
    iCLASS CREDENTIAL
    iCLASS FOB/TAG
	
	3.0 cm/1.2"
	8.0 cm/3.1"
	4.0 cm/1.6"
		
		3.0 cm/1.2"
		8.0 cm/3.1"
		4.0 cm/1.6"
			
			5.0 cm/2.0"
			12.0 cm/4.7"
			6.0 cm/2.4"
				
				4.0 cm/1.6"
				12.0 cm/4.7"
				7.0 cm/2.8"

TYPICAL READ RANGES*
MIFARE/DESFire CREDENTIALS
    MIFARE CLASSIC CREDENTIAL
    MIFARE DESFire CREDENTIAL
    MIFARE CLASSIC FOB/TAG
	
	7.0 cm/2.8"
	3.0 cm/1.2"
	3.0 cm/1.2"
		
		7.0 cm/2.8"
		3.0 cm/1.2"
		3.0 cm/1.2"
			
			12.0 cm/4.7"
			5.0 cm/2.0"
			5.0 cm/2.0"
				
				11.0 cm/4.3"
				4.0 cm/1.6"
				4.0 cm/1.6"

SMART CARD COMPATIBILITY	Secure Identity Object™ (SIO) on iCLASS Seos, iCLASS SE/SR, MIFARE DESFire EV1 and MIFARE Classic Standard iCLASS Access Control Application ISO14443A (MIFARE, DESFire, NFC) CSN, ISO14443B CSN, ISO15693 CSN			
CRYTO 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), MIC (Korea), NCC (Taiwan), iDA (Singapore), ROHS			
OPERATING TEMPERATURE	-31ºF to 150ºF (-35ºC to 65ºC); BLE: -15ºto 150ºF (-25º to 65ºC)			
OPERATING HUMIDITY	5 to 95% relative humidity (non-condensing)			
CURRENT (@ 16 VDC) NORMAL STANDBY CURRENT MAXIMUM AVERAGE CURRENT	60mA 200mA	60mA 200mA	65mA 200mA	85mA 220mA
TERMINATION	14 wire 45 cm Pigtail (D-version) or 14 wire terminal block (DT-version)			
TAMPER OUTPUT	Yes (Optical Tamper)			
HOLD WIRE INPUT	Yes			
PANEL INTERFACES	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.

OmniClass™ 2.0 Contactless Smart, Multi-Technology and BLE Readers

Multi-Technology Readers Technical Specifications

PART NUMBER	OM16BHOND(T)/OM18BHOND(T)	OM31BHOND(T)/OM33BHOND(T)	OM41BHOND(T)/OM43BHOND(T)	OM56BHOND(T)/OM58BHOND(T)
MOUNTING	Large mullion size suited for mullion-mounted door installations or any flat surface	Mini-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	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 COLOR	Black			
DIMENSIONS (W × H × D)	4.8 × 15.3 × 2.3 cm 1.9" × 6.0" × 0.9"	4.8 × 10.3 × 2.3 cm 1.9" × 4.1" × 0.9"	8.4 × 12.2 × 2.4 cm 3.3" × 4.8" × 1.0"	8.5 × 12.2 × 2.8 cm 3.3" × 4.8" × 1.1"

TYPICAL READ RANGES*
iCLASS CREDENTIALS
  iCLASS SEOS CREDENTIAL
  iCLASS CREDENTIAL
  iCLASS FOB/TAG
	3.0 cm/1.2"
	8.0 cm/3.1"
	4.0 cm/1.6"
		3.0 cm/1.2"
		8.0 cm/3.1"
		4.0 cm/1.6"
			5.0 cm/2.0"
			12.0 cm/4.7"
			6.0 cm/2.4"
				4.0 cm/1.6"
				12.0 cm/4.7"
				7.0 cm/2.8"

TYPICAL READ RANGES*
MIFARE/DESFire CREDENTIALS
  MIFARE CLASSIC CREDENTIAL
  MIFARE DESFire CREDENTIAL
  MIFARE CLASSIC FOB/TAG
	7.0 cm/2.8"
	3.0 cm/1.2"
	3.0 cm/1.2"
		7.0 cm/2.8"
		3.0 cm/1.2"
		3.0 cm/1.2"
			12.0 cm/4.7"
			5.0 cm/2.0"
			5.0 cm/2.0"
				11.0 cm/4.3"
				4.0 cm/1.6"
				4.0 cm/1.6"

TYPICAL READ RANGES*
PROXIMITY CREDENTIALS (125KHZ)
  HID PROX/AWID ISO CARD
  HID PROX/AWID KEY/TAG
  EM4102 ISO CARD
	7.0 cm/2.8"
	5.0 cm/2.0"
	11.0 cm/4.3"
		7.0 cm/2.8"
		4.0 cm/1.6"
		11.0 cm/4.3"
			7.0 cm/2.8"
			5.0 cm/2.0"
			11.0 cm/4.3"
				7.0 cm/2.8"
				4.0 cm/1.6"
				8.0 cm/3.1"

SMART CARD COMPATIBILITY	Secure Identity Object™ (SIO) on iCLASS Seos, iCLASS SE/SR, MIFARE DESFire EV1 and MIFARE Classic Standard iCLASS Access Control Application ISO14443A (MIFARE, DESFire, NFC) CSN, ISO14443B CSN, ISO15693 CSN			
CRYTO 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), MIC (Korea), NCC (Taiwan), iDA (Singapore), ROHS			
OPERATING TEMPERATURE	-31°F to 150°F (-35°C to 65°C); BLE: -15° to 150°F (-25° to 65°C)			
OPERATING HUMIDITY	5 to 95% relative humidity (non-condensing)			
OPERATING VOLTAGE RANGE	5 – 16 VDC			
CURRENT (@ 16 VDC) NORMAL STANDBY CURRENT MAXIMUM AVERAGE CURRENT	75mA 200mA	75mA 200mA	85mA 200mA	95mA 200mA
TERMINATION	14 wire 45 cm Pigtail (D-version) or 14 wire terminal block (DT-version)			
TAMPER OUTPUT	Yes (Optical Tamper)			
HOLD WIRE INPUT	Yes			
PANEL INTERFACES	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.

OmniClass™ 2.0 Contactless Smart, Multi-Technology and BLE Readers

ORDERING

SMART READERS (13.56 MHZ ONLY)	
OM15BHOND	OmniClass2 Smart Large Mullion Reader, Pigtail
OM15BHONDT	OmniClass2 Smart Large Mullion Reader, Terminal Block
OM30BHOND	OmniClass2 Smart Mini-Mullion Reader, Pigtail
OM30BHONDT	OmniClass2 Smart Mini-Mullion Reader, Terminal Block
OM40BHOND	OmniClass2 Smart Wall Switch Reader, Pigtail
OM40BHONDT	OmniClass2 Smart Wall Switch Reader, Terminal Block
OM55BHOND	OmniClass2 Smart Wall Switch with Keypad Reader, Pigtail
OM55BHONDT	OmniClass2 Smart Wall Switch with Keypad Reader, Terminal Block
SMART AND MOBILE-READY READERS (13.56 MHZ WITH BLE)	
OM17BHOND	OmniClass2 Smart Mobile-Ready Large Mullion Reader, Pigtail
OM17BHONDT	OmniClass2 Smart Mobile-Ready Large Mullion Reader, Terminal Block
OM32BHOND	OmniClass2 Smart Mobile-Ready Mini-Mullion Reader, Pigtail
OM32BHONDT	OmniClass2 Smart Mobile-Ready Mini-Mullion Reader, Terminal Block
OM42BHOND	OmniClass2 Smart Mobile-Ready Wall Switch Reader, Pigtail
OM42BHONDT	OmniClass2 Smart Mobile-Ready Wall Switch Reader, Terminal Block
OM57BHOND	OmniClass2 Smart Mobile-Ready Wall Switch with Keypad Reader, Pigtail
OM57BHONDT	OmniClass2 Smart Mobile-Ready Wall Switch with Keypad Reader, Terminal Block
SMART AND MOBILE-ENABLED READERS (13.56 MHZ WITH BLE) (MUST PROVIDE MOB# WHEN ORDERING)	
OM17BHONDSP	OmniClass2 Smart Mobile-Enabled Large Mullion Reader, Pigtail
OM17BHONDTSP	OmniClass2 Smart Mobile-Enabled Large Mullion Reader, Terminal Block
OM32BHONDSP	OmniClass2 Smart Mobile-Enabled Mini-Mullion Reader, Pigtail
OM32BHONDTSP	OmniClass2 Smart Mobile-Enabled Mini-Mullion Reader, Terminal Block
OM42BHONDSP	OmniClass2 Smart Mobile-Enabled Wall Switch Reader, Pigtail
OM42BHONDTSP	OmniClass2 Smart Mobile-Enabled Wall Switch Reader, Terminal Block
OM57BHONDSP	OmniClass2 Smart Mobile-Enabled Wall Switch with Keypad Reader, Pigtail
OM57BHONDTSP	OmniClass2 Smart Mobile-Enabled Wall Switch with Keypad Reader, Terminal Block
MOBILE CONFIGURATION CARDS AND CREDENTIALS	
HUCRD633P	HID Custom Mobile Credential, 100 unit minimum order qty, MOB# required
HUSEC9MKY	HID Mobile Key Card, MOB# required, converts reader from mobile-ready to mobile-enabled
HUSEC9XSP	HID Mobile Administration Card, used to adjust BLE settings on reader

MULTI-TECHNOLOGY READERS (13.56 MHZ + 125 KHZ PROX)	
OM16BHOND	OmniClass2 Multi-Tech Large Mullion Reader, Pigtail
OM16BHONDT	OmniClass2 Multi-Tech Large Mullion Reader, Terminal Block
OM31BHOND	OmniClass2 Multi-Tech Mini-Mullion Reader, Pigtail
OM31BHONDT	OmniClass2 Multi-Tech Mini-Mullion Reader, Terminal Block
OM41BHOND	OmniClass2 Multi-Tech Wall Switch Reader, Pigtail
OM41BHONDT	OmniClass2 Multi-Tech Wall Switch Reader, Terminal Block
OM56BHOND	OmniClass2 Multi-Tech Wall Switch with Keypad Reader, Pigtail
OM56BHONDT	OmniClass2 Multi-Tech Wall Switch with Keypad Reader, Terminal Block
MULTI-TECHNOLOGY AND MOBILE-READY READERS (13.56 MHZ, 125 KHZ & BLE)	
OM18BHOND	OmniClass2 Multi-Tech Mobile-Ready Large Mullion Reader, Pigtail
OM18BHONDT	OmniClass2 Multi-Tech Mobile-Ready Large Mullion Reader, Terminal Block
OM33BHOND	OmniClass2 Multi-Tech Mobile-Ready Mini-Mullion Reader, Pigtail
OM33BHONDT	OmniClass2 Multi-Tech Mobile-Ready Mini-Mullion Reader, Terminal Block
OM43BHOND	OmniClass2 Multi-Tech Mobile-Ready Wall Switch Reader, Pigtail
OM43BHONDT	OmniClass2 Multi-Tech Mobile-Ready Wall Switch Reader, Terminal Block
OM58BHOND	OmniClass2 Multi-Tech Mobile-Ready Wall Switch with Keypad Reader, Pigtail
OM58BHONDT	OmniClass2 Multi-Tech Mobile-Ready Wall Switch with Keypad Reader, Terminal Block
MULTI-TECHNOLOGY AND MOBILE-ENABLED READERS (13.56 MHZ, 125 KHZ & BLE) (MUST PROVIDE MOB# WHEN ORDERING)	
OM18BHONDSP	OmniClass2 Multi-Tech Mobile-Enabled Large Mullion Reader, Pigtail
OM18BHONDTSP	OmniClass2 Multi-Tech Mobile-Enabled Large Mullion Reader, Terminal Block
OM33BHONDSP	OmniClass2 Multi-Tech Mobile-Enabled Mini-Mullion Reader, Pigtail
OM33BHONDTSP	OmniClass2 Multi-Tech Mobile-Enabled Mini-Mullion Reader, Terminal Block
OM43BHONDSP	OmniClass2 Multi-Tech Mobile-Enabled Wall Switch Reader, Pigtail
OM43BHONDTSP	OmniClass2 Multi-Tech Mobile-Enabled Wall Switch Reader, Terminal Block
OM58BHONDSP	OmniClass2 Multi-Tech Mobile-Enabled Wall Switch with Keypad Reader, Pigtail
OM58BHONDTSP	OmniClass2 Multi-Tech Mobile-Enabled Wall Switch with Keypad Reader, Terminal Block

For more information

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