

LECTUS secure readers (OSDP)

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- ▶ 13.56 MHz proximity readers, compatible with Bosch access modular controllers (AMC2), as well as access control software (BIS/ACE, AMS and APE)
- ▶ OSDP V2 Secure Channel, AES 128 bit encryption and Bosch coded MIFARE DESFire EV1 credential support for high level end-to-end security
- ▶ Support of multiple card technologies (standard iCLASS, iCLASS SE, iCLASS Seos, MIFARE Classic, and MIFARE DESFire EV1)
- ▶ IP55 rating allows both indoor and outdoor installation (an additional gasket will improve the rating to IP65)

System overview

The LECTUS secure reader (RS485) family has four different form factors. The readers are ideal for new and existing installations and they nearly meet all installation requirements for indoor and outdoor use. The mini mullion reader offers the most attractive pricing solution. The US Gang Box sized readers can be ordered with or without a keypad. The keypad functionality offers higher security due to possible multi-factor authentication.

The keypad functionality can also be used for a variety of access control features including the option to set a door to long-term open.

The LECTUS secure readers are fully compatible with the Bosch Access Management portfolio, including the Management Software Systems (BIS/ACE, AMS and APE), the Access Modular Controller (AMC2), and the MIFARE and iCLASS credential portfolio.

The support of 13.56MHz credential formats offers a migration path for proximity installations.

The reader is easily configurable via configuration cards.

The state of the art security is achieved at its highest level through encrypted communication between card and reader (e.g. by using Bosch coded DESFire EV1 credentials), as well as between reader and AMC2 controller via the OSDP v2 Secure Channel Protocol. The technology-independent readers support standard iCLASS, iCLASS Seos, MIFARE classic, and MIFARE DESFire EV1.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Korea	KCC	Korea Certification Mark
Europe	CE	Declaration of Conformity
Global	RoHS	
USA	UL	294 Certified
	FCC	FCC Compliance

Installation/configuration notes

For the configuration of the readers, a set of configuration cards is available. The reader's address is set via the address configuration cards, which have to be ordered separately (see ordering information for further details). It is also possible to change the default reading of Bosch code from MIFARE Desfire credentials to CSN reading only, via a special configuration card.

The serial interface of the RS485 allows an easy connection to the Bosch RS485 access controllers. The OSDPv2 secure channel protocol encrypts the communication between the reader and the controller. Simultaneously, the communication between the reader and the card is encrypted (e.g. by using Bosch coded MIFARE credentials). This end-to-end encrypted communication process ensures high-level security. The hardware of both product lines is compatible with the same software and hardware of the Bosch portfolio. In addition, the LECTUS secure readers provide the same low-current consumption and a 5 to 16 volts operation.

The integrated audio sounder provides various tone sequences to alert: access granted, access denied, power up and diagnostics. 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.

The rugged polycarbonate enclosure is designed to withstand severe environmental conditions and provides reliable performance and resistance to vandalism. The IP class can be upgraded to IP65, with additional gaskets.

Technical specifications

Operating Voltage Range	5 to 16 VDC
Current Draw	60 to 220 mA (peak), 16V (see manual for details)
Environmental rating	IP 55 (IP 65 with optional gasket)
Operating temperature	- 25 °C to 65 °C (-15 °F to 150 °F)
Humidity	5 to 95%, no condensation water
Housing Material	Polycarbonate (UL 94)
Color	Black
Display	Multicolored RGB LED bar
Panel connection	Terminal strip
Card compatibility	<ul style="list-style-type: none"> iCLASS, iClass SE; iCLASS Seos; NFC Bosch coded MIFARE classic Bosch coded MIFARE DESFire EV1,

	When using configuration card: MIFARE classic serial number MIFARE DESFire EV1 serial number (32 bit)
Operating frequency	13.56 MHz
Typical reading distance ¹⁾ LECTUS secure 1000 RO	9 cm (iCLASS card) 6 cm (MIFARE DESFire EV1 card) 6 cm (MIFARE Classic card) 4 cm (iCLASS key fob) 3 cm (MIFARE Classic key fob)
Typical reading distance ¹⁾ LECTUS secure 2000 RO	9 cm (iCLASS card) 6 cm (MIFARE DESFire EV1 card) 6 cm (MIFARE Classic card) 4 cm (iCLASS key fob) 3 cm (MIFARE Classic key fob)
Typical reading distance ¹⁾ LECTUS secure 4000 RO	13 cm (iCLASS card) 8 cm (MIFARE DESFire EV1 card) 1 cm (MIFARE Classic card) 7 cm (iCLASS key fob) 5 cm (MIFARE Classic key fob)
eyeyTypical reading distance ¹⁾ LECTUS secure 5000 RO	14 cm (iCLASS card) 5 cm (MIFARE DESFire EV1 card) 13 cm (MIFARE Classic card) 8 cm (iCLASS key fob) 5 cm (MIFARE Classic key fob)

¹⁾Typical read range achieved in air. Different types of metal will cause some degradation (typically up to 20%). Use spacers to space product off metal and improve read range if required.

Dimension (W x H x D)	See ordering information
Weight (g)	See ordering information

NOTE: Using the Surface mount panel with the ARD-SER10-xx will:

- reduce the environmental rating class to IP45, and
- Disable the tamper protection.

NOTE: HID listings for UL and FCC are valid for this product family. For details see www.hidglobal.com/ certifications.

Ordering information

ARD-SER10-RO LECTUS secure 1000 RO iCLASS reader

iCLASS/MIFARE reader, mini-mullion size, suited for mullion-mounted door installations, U.S. single-gang J-box or any flat surface, terminal strip, 4.8 x 10.3 x 2.3 cm, 84 g net

Order number **ARD-SER10-RO**

EWE-RDR-IW 12mths wrty ext. Access Control Reader

12 months warranty extension

Order number **EWE-RDR-IW**

ARD-SER15-RO Card reader, OSDP

iCLASS/MIFARE reader, mini-mullion size, suited for mullion-mounted door installations, U.S. single-gang J-box or any flat surface, terminal strip, 4.8 x 15.3 x 2.3 cm, 120 g net

Order number **ARD-SER15-RO**

EWE-RDR-IW 12mths wrty ext. Access Control Reader

12 months warranty extension

Order number **EWE-RDR-IW**

ARD-SER40-RO Card reader, OSDP

iCLASS/MIFARE reader, wall switch size, designed to mount and cover single gang switch boxes primarily used in the Americas, includes a slotted mounting plate for European and Asian spacing, terminal strip, 8.4 x 12.2 x 2.4 cm, 215 g net

Order number **ARD-SER40-RO**

EWE-RDR-IW 12mths wrty ext. Access Control Reader

12 months warranty extension

Order number **EWE-RDR-IW**

ARD-SERK40-RO Card reader with keypad, OSDP

iCLASS/MIFARE reader, wall switch size, designed to mount and cover single gang switch boxes primarily used in the Americas, slotted mounting plate for European and Asian spacing, terminal strip, keypad (4x3), 8.5 x 12.2 x 2.8 cm, 226 g net

Order number **ARD-SERK40-RO**

EWE-RDRPRM-IW 12mths wrty ext. Premium reader

12 months warranty extension

Order number **EWE-RDRPRM-IW**

ARA-OSDP-ACNL Address configuration card set for OSDP

Set off eight cards for the configuration of the reader address 1 to 8.

Order number **ARA-OSDP-ACNL**

ARA-OSDP-CSN Card format config card (CSN)

Switches the code from Bosch coded reading for MIFARE classic and MIFARE DESFire EV1 to CSN reading.

Order number **ARA-OSDP-CSN**

ARA-SER10-IP65 LECTUS Secure 1000 Gasket for IP65, 10pc

Gasket for protection class IP65, material Chloroprene Rubber, dimensions 4.625 x 10 x 0.2 cm, 10 pcs/each

Order number **ARA-SER10-IP65**

ARA-SER15-IP65 LECTUS Secure 2000 Gasket for IP65, 10pc

Gasket for protection class IP65, material Chloroprene Rubber, dimensions 4.625 x 15,35 x 0.2 cm, 10 pcs/each

Order number **ARA-SER15-IP65**

ARA-SER40-IP65 LECTUS Secure 4000 Gasket for IP65, 10pc

Gasket for protection class IP65, material Chloroprene Rubber, dimensions 8.1 x 11.9 x 0.2 cm, 10 pcs/each

Order number **ARA-SER40-IP65**

ARA-SERK40-IP65 LECTUS Secure 5000 Gasket for IP65, 10pc

Gasket for protection class IP65, material Chloroprene Rubber, dimensions 8.1 x 11.9 x 0.2 cm, 10 pcs/each

Order number **ARA-SERK40-IP65**

F01U508789 Surface mount panel, 10pcs

Surface-mount panel for LECTUS secure 1000 WI readers, 10 items/packaging unit

Order number **F01U508789**

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