

ARD-FPBEW2-H3 Fingerprint reader, Multiclass



- ▶ Rugged IP67/IK09 housing for tough environment and outdoor installations
- ▶ Compatibility with AMS 2.0, BIS/ACE 4.5 and later versions, for easy enrollment and configuration of fingerprint templates as well as card data in one system
- ▶ Flexibility due to Wiegand and OSDP support, and dual-frequency RFID technology supporting proximity cards and smart cards
- ▶ Highest security standard supporting OSDPv2 secure channel protocol and Bosch coded Mifare Desfire credentials

System overview

The integration with AMS and BIS/ACE management systems offers highest level of convenience due to the enrollment of fingerprints and management of cardholder data in one system. To ensure data privacy and protection, the fingerprint templates can be securely stored in the database of the management system.

The RS485 interface transmits data via the OSDPv2 secure channel protocol. In addition to the ability to read Bosch coded Mifare credentials, this solution offers a high security level with end-to-end encryption.

The fingerprint reader is equipped with the ability to read Bosch coded MIFARE credentials, ensuring a straightforward configuration and high level of security.

Featuring dual-frequency RFID technology, ARD-FPBEW2-H3 supports both low frequency (125 kHz) and high frequency (13.56 MHz) RFID standards in addition to the fingerprint as a credential. ARD-FPBEW2-H3 supports most types of RFID card standards with a single device including MIFARE, HID iCLASS, DESFire, HID Prox and EM.

The ARD-FPBEW2-H3 is able to withstand a high level of impact, making it vandal-resistant. Coupled with IP67 ingress protection, it is a perfect solution for outdoor applications. The device provides superior protection against invasive moisture, dust and even liquids.

Regulatory information

Region	Regulatory compliance/quality marks	
Europe	CE	
USA	FCC	FCC Compliance
Korea	KCC	Korea Certification Mark

Installation/configuration notes

The different access control configuration modes make the use of this fingerprint reader very flexible. The configuration allows four different access modes for the user:

- card plus fingerprint
- card or fingerprint
- card only
- fingerprint only

The fingerprint images are converted via minutiae extraction into algorithmic templates which can be stored either in the reader device, or in the secure Microsoft SQL Server database of the management system.

ARD-FPBEW2-H3 comes with TCP/IP interface and two installation options to use with AMC2 (RS-485 or Wiegand), providing higher flexibility for different environments. The fingerprint templates can be enrolled, configured and managed via the AMS or BIS-ACE system. No separate enrollment software is needed.

Parts included

Quantity	Component
1	Fingerprint reader
1	Bracket
1	Bracket fixing screw
1	Diode
1	Heat shrink
1	Resistor
2	Fixing screws
1	Quick installation guide
1	Safety information
1	OSS information

Technical specifications

Electrical

Operating voltage (VDC)	12 VDC
Current consumption (mA)	600 mA

Mechanical

Material	Polycarbonate
Dimensions (H x W x D) (mm)	50 mm x 172 mm x 38.2 mm (top) 50 mm x 172 mm x 43.5 mm (bottom)
Weight (g)	251 g

Environmental

IP rating	IP67
Impact protection	IK09
Operating temperature (°C)	-20 °C – 50 °C
Operating temperature (°F)	-4 °F – 122 °F
Operating relative humidity, non-condensing (%)	0% – 80%
Storage relative humidity (%)	0% – 90%
Storage temperature (°C)	-40 °C – 70 °C
Storage temperature (°F)	-40 °F – 158 °F

Operation

Credential type	Biometric data
Color	Black/Silver
LED indication	Multi-color
Reading format	MIFARE Classic (Bosch data record); MIFARE DESFire EV1 (Bosch data record); iCLASS; iCLASS SE; EM 4102; HID Prox; Seos; HID Corporate-1000; MIFARE DESFire EV2
Protection	Tamper (micro switch)

Capacity

Number of users	<ul style="list-style-type: none"> 400,000 (1:1 matching) 100,000 (1:N matching)
Templates in DB	4,000,000 (10 templates per person; 1:1 matching)

Storage

Storage templates	<ul style="list-style-type: none"> Template on device Template in secure database of AMS or BIS/ACE
-------------------	---

System requirements

Memory (RAM) (MB)	256 MB
Processor type	1.2 GHz Quad Core

Audio

Audio output	Multi-tone buzzer (only OSDP)
--------------	-------------------------------

Connectivity

Reader interfaces	Wiegand; RS485
Host interface	Ethernet

Ordering information

ARD-FPBEW2-H3 Fingerprint reader, Multiclass
Fingerprint reader, 5.0 x 17.2 x 4.3 cm, 251 g net
Order number **ARD-FPBEW2-H3 | F.01U.404.049**



<https://www.boschsecurity.com>