ARD-FPBEW2-H2 Fingerprint Reader, Multiclass

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Invented for life

▶ Class-leading reading performance with powerful quad-core CPU technology

▶ Rugged IP67/IK09 housing for tough environment and outdoor installations

▶ Flexibility with multi-card support due to dual-frequency RFID technology

▶ Integration with AMS and BIS/ACE 4.5 (and later versions) for easy enrollment and configuration of fingerprint templates and card data

System overview

BioEntry W2 features class-leading reading performance that enhances user experience by offering fast matching and quick response for users. The integration with AMS and BIS/ACE management systems offers highest level of convenience due to the enrollment of fingerprints and management of card holder data in one system. To ensure data privacy and protection, the fingerprint templates can be securely stored in the database of the management system. This also ensures fast reading performance in good installation conditions of under 1 second for 1:1 matching (card plus fingerprint).

The BioEntry W2 is able to withstand a high level of impact, making it vandal-resistant. Coupled with IP67 ingress protection, BioEntry W2 is a perfect solution for outdoor applications. The device provides superior protection against invasive moisture, dust and even liquids.

Featuring dual-frequency RFID technology, BioEntry W2 supports both low frequency (125 kHz) and high frequency (13.56 MHz) RFID standards in addition to the fingerprint as a credential. BioEntry W2 supports

most types of RFID card standards with a single device including MIFARE, HID iCLASS, DESFire, HID Prox and EM.

BioEntry W2 features fake fingerprint prevention technology. Using dynamic pattern, liveness feature and unnatural feature analysis, the engine blocks fake fingerprints made from various materials including clay, rubber, glue, paper, film and others.

BioEntry W2 is equipped with the ability to read Bosch coded Mifare credentials, ensuring a straightforward configuration and high level of security.

Certifications and approvals

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

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.

BioEntry W2 comes with TCP/IP interface and two installation options to use with AMC2 (RS-485 or Wiegand), providing higher flexibility for different environments.

Parts included

Quantity	Component
1	Fingerprint reader
1	Mounting material
1	Installation manual

Technical specifications

General

Biometric	Fingerprint
Storage templates	• Template on device • Template in secure database of AMS or BIS/ACE
Modes for access	• Fingerprint plus card • Fingerprint or card • Card only • Fingerprint only
Max. user	• 400.000 (1:1 matching) • 100.000 (1:N matching)
Max. template in DB	• 4.000.000 (10 templates per person; 1:1 matching)
Card compatibility	• EM (26 bit standard coding scheme)

- HID Prox (26 / 37 bit standard coding scheme)
- MIFARE classic (ISO 14443A CSN / Bosch code)
- MIFARE DESFire EV1 (ISO 14443A CSN / Bosch code)
- iCLASS (26 / 37 bit standard coding scheme)
- HID Corporate-1000 (35 / 48 bit standard coding scheme)
- iCLASS SE (26 / 37 bit SIO - Secure Identity Object)
- iCLASS Seos (26 / 37 bit SIO - Secure Identity Object)

Electrical

Operating voltage	12 VDC
Current draw	600 mA max. (peak)
Memory	• 2GB flash • 256MB RAM
CPU	1.2 GHz Quad Core
Sound	Multi-tone buzzer
Tamper detection	Supported
Interfaces	• Ethernet (TCP/IP 10/100 Mbps) with PoE (IEEE 802.3af) • RS-485 (OSDP v2) • Wiegand

Mechanical

Housing material	Polycarbonate
Dimensions (H × W × D)	50 mm x 172 mm x 38.2 mm (top) 50 mm x 172 mm x 43.5 mm (bottom)
Weight	251 g
Color	Silver / Black
LED color	Multicolor

Environmental

Impact protection	IK 09
Environmental rating	IP 67
Operating temperature	-20℃ to +50℃ (-4℉ to 122℉)
Humidity	0% to 80%, no condensation of water