



OEM EABR READER

- **Robust:** durable and weatherproof
- **Powerful:** high spec microprocessor and memory
- **Customisable:** Linux OS and Python IDE for OEM development

Ideal for **custom** developments

WHO SHOULD USE THE EABR?

The EABR combines a powerful customisable controller with a feature rich reader.

This combination is particularly useful in creating bespoke workforce management solutions.

The controller/reader combination results in a fully functional workforce management terminal, ensuring excellent uptime.

OTHER FEATURES:

- Communication ports provided include Ethernet, 2 x USB, RS485 and S-Bus
- Standard black finish
- Rated IP65 for robust outdoor environments

The Embedded Application Biometric Reader (EABR) is specifically designed for the OEM market and provides the perfect platform to run specialised applications.

Dual frequency

The reader features dual frequency RFID with HID and MiFARE read/write capabilities, a world-class biometric fingerprint scanner, a touch screen display and 12-digit keypad, all housed within a robust, weatherproof IP65 housing.

The EABR offers a powerhouse of features for developers to build a fully functional, offline-ready data clocking or workforce management terminal - simply by porting your custom T&A or WFM code onto the device.

High specification

Developers can take immediate advantage of a solid framework that includes a 1GHz onboard microprocessor, 512MB of RAM, as well as a 16GB micro SD card, coupled with several modes of communication, such



as TCP/IP stack, RS485 and two USB ports. This enables the power needed to run advanced applications.

The latest and most powerful encryption tools, including AES, SSH, SSL and TLS are available and the device operates on the open source Debian 8 Linux operating system, providing you with unrivalled interoperability and flexibility.

The EABR platform is the ideal tool for custom development. Applications include the creation of custom validation sequences in an access control solution, where employees must undertake a breathalyser, then present their license, and finally scan the fingerprint before gaining access into secure areas.

The device is also ideal for time and attendance applications, or in a manufacturing facility for job tracking and costing, as well as for cashless vending where users scan their finger or ID to make purchases at an onsite facility, such as a canteen or vending machine.

Specifications

OEM EABR READER

Model name	OEM EABR (5,000 user capacity)	OEM EABR (10,000 user capacity)
Part number(s)	HCB901 / HCB911	HCB902 / HCB912
Product description	OEM biometric controller, HID read/write	
Colour	Black	
Display	Backlit resistive touchscreen TFT- LCD display, 480 x 272 pixels, 16 million colours	
Keypad	Backlit 12 digit high-use keypad	
Dimensions (d-w-h)	7.4cm x 16.4cm x 20.8cm [2.91" x 6.46" x 8.18"]	
Approximate product weight	1.00 kg [35.3 oz]	
Material	Bay Blend plastic	
Electrical specifications		
Input voltage	11 - 15 VDC • polarity sensitive	
Power requirements at 12 VDC	250 mA current • 3 W power	
Power input protection	Reverse polarity and over-current protection	
System specifications		
Processor	1GHz, AM3352x ARM® Cortex-A8, -VFP and NEON non-floating-point accelerators	
Memory	RAM: 512 MB DDR3; Non-volatile Memory: 16 GB micro SD card, Class 4; Optional on Rev 3 PCB; 4 GB On-board eMMC	
Operating system	ARM Linux, Debian 8	
User interface specifications		
Tag specifications	13.56 MHz • 125 kHz Proximity	
CSN read capability from various Tag types	Slim tags, Omega tags, Impro Trinary tags (1074 and 2074), Philips HITAG™ 1 Philips HITAG™ 2 • HID tags (H10301 • H10302 and H10304) • ISO 15693-2 iClass Tags • ISO 18092 FeliCa tags ISO 14443A MIFARE® tags • as well as Impro QuadTransmitter integrated tags	
Full read/write capability	HID iClass and MIFARE® Classic	
Biometric	Morphosmart CBM series biometric fingerprint reader	
User validation modes	Finger only • Tag only • PIN only • Tag + finger + PIN • Tag or finger or PIN • Tag + finger • Tag or finger • Finger, tag and PIN; with any combination of the three	
Fingerprint reader		
Kind	Morphosmart CBM series	
Template limit (Free)	500 templates (free) • 3000 / 5000 templates (licenced) templates on HCB902 up to 10,000	
Environmental specifications		
Operating temperature	0° to +60° C • -13° to +140° F	
Storage temperature	-40° to +80° C • -40° to +176° F	
Operating humidity	0 to 95% relative humidity non-condensing (at +40° C / +104° F)	
Environmental rating	IP65	
Connectivity		
Ethernet	TCP-IP 10M / 100M	
USB	2x USB 2.0 ports	
RS485	9 600, 19 200, 28 800, 38 400, 57 600 and 115 200 selectable via the Protocol	
S-Bus	9600 Baud, Propriety, encrypted, bidirectional two-wire bus system	
Certifications		
SABS (RSA)	✓	
RoHS	✓	



Impro Technologies
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in the access control industry

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