

Hitachi M-1 Finger Vein Door Access Unit



www.hitachi-eu.com/veinid

Background

The M-1 access control device uses a self-contained finger vein biometric scanner unit that can be linked to a variety of standardised interfaces according to requirements. It is contained in a rugged plastic casing with concealed cable exit suitable for mounting in typical physical access control applications.

Controller Unit

- RabbitCore RCM - Micro Core Module with:
- Rabbit 3000 8 bit Micro running at 44.2 MHz
- 512K Flash
- 1 MB SRAM, Expandable to 8MB

Finger Vein Biometric Scanner

Hitachi-Omron TS-E3F1-50ZRZ Compact Scanner

Interface:	RS 232
Dimensions [W x D x H]	69 x 85 x 43
Template Storage	Internal Flash or External [server or card]
Template Size	Approx 500 bytes
Authentication Method	1:1, 1:N [N up to 1000]
False Reject Rate	0.01%[JIS based testing]
False Accept Rate	0.0001% [JIS based testing]
Failure to Enrol Rate	0.08% [IBG Test 2006]
Weight	Approx 0.1 Kg
Operating Temperature	5-45 °C
Power	DC 12V
Operating Environment	Avoid direct sunlight

User Interface Options

- Pin-Pad and Display
- Vandal-proof/Water-proof Pin-Pad for PIN or other code entry
- Key matrix is variable but can be up to 16 keys
- Display: 128*22 Pixels in Orange with 4 bit Grey-scale
- Optional sounder for user feedback
- Contact-less Smartcard Options for ISO 14443 type A or B, reader fitted under key-pad
- Read range up to 15cm according to Mifare card Antenna
- Wireless Token/RFID
 - HID iClass 13.56MHz can be fitted instead of Mifare
 - RF data encryption and mutual authentication using 64-bit keys for each application area
 - Optional DES or Triple DES encryption for HID application
- Smartcard Reader
 - ISO 7816 [1,2,3,4] contact card reader can be fitted in place of display

Power Requirements

- Mid-span and End-span Power-over-Ethernet [POE] ready
- Fully isolated POE power supply
- External 12V 1A input jack socket
- 2 x protected 3-12 volt capable inputs for external switch detection



System Interfaces

- Power: DC 12V
- Local Area Network: TCP/IP over 10/100Base-T
- Multiple Web page capable with SSL secure login
- HTTPS with SSL version 3 and Transport Session Layer [TLS] ver. 1
- Up to 120 Kbits/sec processing for encryption algorithms
- Storage in FAT file system using 8 Mb Extended Memory
- 1 x RS 232 Ports [PCB Screw Terminal]
- 1 x RS 485 [RJ45 Socket]
- 1 x Wiegand 26 Bit Access Control protocol according to SIA stds
- 2 x open-collector output drives for low power relays or bezels
- 2 x protected 3-12 volt capable inputs for external switch detection

Sizing

Case Dimensions, mm [WxDxH] 100 x 86 x 202
Weight 0.4Kg