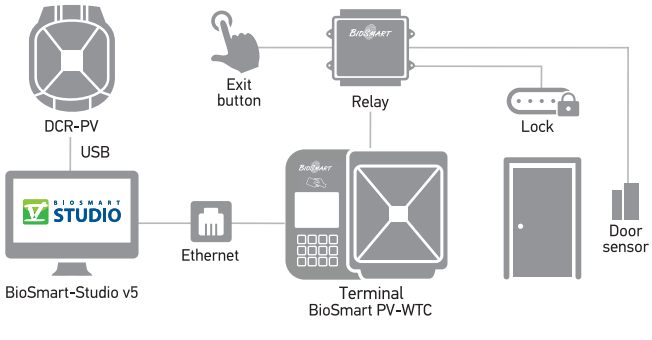
PV-WTC PALM VEIN TERMINAL

Palm vein identification is something someone has probably heard about but not often experienced. It is a technology developed in Japan, which is widely used there. It provides high security (up to one million reference points) together with the highest accuracy that a biometric technology can offer. The biometric sensor uses a multispectral long near-infrared waves (850 and 940 nm), detecting low levels of oxygen vein blood and distinguishing it from living tissue. It is then transformed into a pattern which describes veins inside a person's palm. The pattern is converted into a template – this is a mathematical model. The template gets encrypted and stored into a database and is matched with what is already stored for proper identification.



Highlights

- Solidly built housing with IP65 ingress protection
- TCP/IP-based with support of pure standalone mode (local enrolment)
- SSL encrypted connection to the management software
- Integrated RFID card reader, with support of template on card
- Extendable functionality via upgrades

Access Control Features

- Single or multi-factor authentication (Card + Biometric, PIN + Biometric)
- Secure door strik/lock, PTE buttons, alarms connection via ZFlex Relay Module
- 2-Man rule (2 authorized employees are required to grant access)
- Escort mode (1 authorized employee and a visitor)
- Duress palms (silent alarm in case of a forced entry)
- Access zones (restrict access of employees to certain areas)
- Anti-passback (no entry allowed if employee did not leave premises first)
- 2 tamper sensors

Technical Specifications

Authentication types	Biometric or card, Card + biometric PIN + biometric, Template on card
Users, card + palm or PIN + palm	Up to 300 000
Users, palms*	Up to 2 000
Event log capacity	1 million
Access schedules	250
Template size	0.8 / 4k
Match time (1:1000) in local mode, by palms	< 2 sec
FAR (False Acceptance Rate)**	0,00008 %
Smart card reader	MIFARE Classic®/MIFARE® DESFire® EV1 (13.56 MHz) HID Prox/iClass/iClass SE (125 kHz / 13.56 MHz) Legic Advant (13.56 MHz) EM Marin (125 kHz)
Keypad	Touch, 12 buttons, programmatic function buttons
Audio	Speaker and multi-tone buzzer
Communication	Ethernet (100BASE-T), RS485, RS232 via a converter
Wi-Fi, Bluetooth	Optional
Controller type	Not required
ZFlex Relay Module support	Yes, for extra layer of security
Wiegand I/O	Output, 26/32 bits
PTE button inputs / door sensor inputs	1
Door strike relay	12V, 1A
Tamper detection	1 sensor on case opening 1 switch on removing device from wall
1 switch on removing device from wall	IP56
Power requirements	12V±15%, 1A
PoE (Power over Ethernet)	Optional, IEEE 802.3af
Operating temperature	0 ... +50°C (32 ... 122 °F)
Ingress protection	IP65
Dimensions (H x W x D)	215 x 150 x 117 mm (8.46 x 5.90 x 4.60 in)
Weight	820 g (29 oz)
Regulatory approvals	CE, FCC, RoHS2
Warranty	3 years

* *Depends on the number of enrolled palms. Affects recognition speed.*

** *Calculated value: depends on quality of users' biometric data.*