Access control Palm vein RFID verification

DIGIcontrol-PLD

- RFID reader with Palm vein verification
- Contact free, hygienic palm vein verification
- High precision FAR:0,00004%, FRR: 1%
- DESfire & LEGIC-Advant RFID
- 128Bit AES & 3DES encoding
- Reading range up to 4cm
- RS485 IBB interface
- 3 colour LED status indicator
- Integrated buzzer
- Coded relay interface with authentication

DIGIcontrol-PLD RFID reader with palm vein verification

DIGIcontrol-PLD is a new milestone in extreme high security RFID DESFire & LEGIC-Advant access control readers from ATS. Based on PalmSecure technology from Fujitsu, the DIGIcontrol-PLD verifies the stored palm data of the ID card with the user's palm.

After reading the card with the users palm template (<1kB) an orange LED ask the user to place his palm 5cm above the scanner. Within a second the device captures a near infrared image of the unique palm pattern, converts the image into a biometric template and matches it against the template stored on the RFID card. The result of the comparison is send over the ATS-IBB to the floor controller, which decides access allowed or not. This is shown by a green or red LED to the user.

No biometric footprint or residual trace is left behind after authentication. The biometric template is only stored on the users own RFID card. The palm vein verification is processed local by two independent low power ARM CPU's. Storage of the biometric data on the RFID cards is encrypted with 128 bit AES or 3DES.

Unlike other forms of biometric scanners, the DIGIcontrol-PLD palm vein reader is robust and scans beneath the surface of the skin demonstrating a high tolerance of skin surface problems such as dryness, roughness, moisture, or scarring.

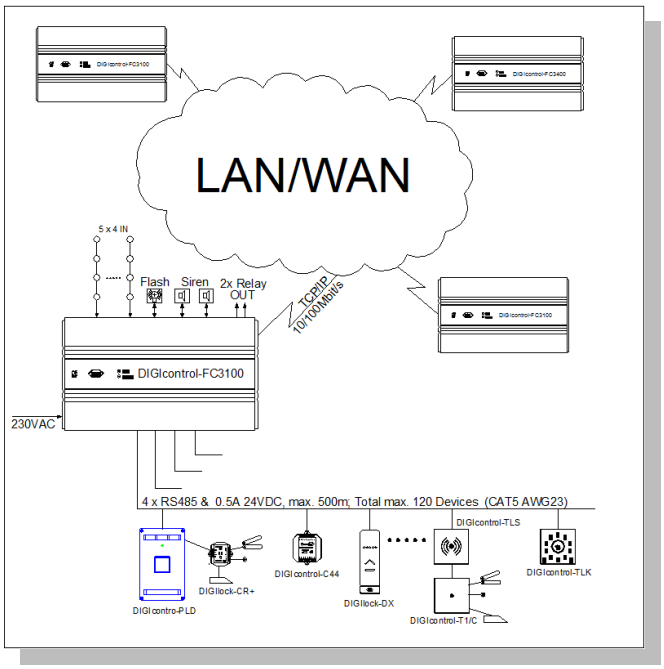
The palm vein device can only recognize the pattern if the blood is actively flowing within the individual's veins, which means that forgery is virtually impossible. Vein patterns are virtually un-spoofable. This provides highly reliable authentication with low false accept and reject rates and also generates fast and easy enrollment.

The compact unit which includes the reader and palm vein verification electronic connects directly to the ATS-IBB bus and incorporates also encrypted DIGIlock-CR+ relay interface to control and monitor the access point.

DIGIcontrol-PLD palm vein pattern reader use digital encryption specific to a user's system, providing an extra layer of privacy and assurance that the patterns cannot be used for identification by anyone else in any other context. It's fully compatible to DIGIcontrol-3000 security systems and an ideal extension for high security access points.

The DIGIcontrol-PLD palm reader works with an external IBB baud rate of 56kB and reader frequency of 13,56Mhz, a unique serial number enables the host configuration of a bus ID in the range between 1 and 120. The unit could be configured to read DESFire or LEGIC Advant cards.

Up to 100 different readers with or without palm vein verification, to control up to 50 doors, could be connected with a single cable to an FC3xxx floor controller.



Technical Data

DIGIlock-PN:

2 low power ARM CPU's for card encryption, palm capture and verification
Contactless palm vein biometric authentication
Forgery protection based on liveliness
False acceptance rate below 0,00004%
False rejection rate of 1%
5- 40mm reading distance
3 colour LED indicator for access rights
Integrated buzzer
1 RS485 IBB interface to door controller
1 Coded relay interface
Temperature range: -10° to +50°C
Dimensions: W106 x H168 x D62+35 mm
Power: 12-24VDC / 300 mA max.

Delivery Contents:

DIGIcontrol-PLD complete with installation and wiring instructions.

Options:

DIGIlock-CR+:

CMOS microprocessor with encryption reader interface
1x Relay output for lock control
2x monitored inputs for door monitoring, egress button, …
1x digital input for reader authorisation after installation
Dimensions: Ø60 x H 21mm (fits in DIN-switch box
Power: 10,5-24VDC / 30 mA max.
Temperature range: -10° to +50°