BioLock + Smartcard

Biometric smartcard for enhanced security and performance

BRS
BIO RECOGNITION SYSTEMS

Biometric Physical Access Control to support High Security requirements

The BioLock + Smartcard system has been designed to meet the most demanding security requirements. The solution combines the proven performance of the BioLock fingerprint reader with biometric fingerprint templates held on a smartcard and online authentication to an enterprise-wide physical access control system (PACS). The system is well suited to high traffic applications with a verification response time of less than 1 second.

The BRS BioLock+Smart Reader can operate in indoor environments or in outdoor environments exposed to the weather due to its IP65 rating.

The Smartcard operates using the ISO/IEC 14443 contactless interface to provide both high transaction throughput and high data integrity.

Biometric Fingerprint Templates

A fingerprint template is stored on the Smartcard together with an electronic signature, and encoded using a private key provided by the BioLock.

Verification

Two verification modes are supported:

- CHUID verification only, when requesting access from a secure zone to a less secure one;
- CHUID verification + Biometric user authentication, when requesting access from an insecure to a secure zone.

Smartcard reader

BioLock combined with Smartcard reader

BioLock + Smartcard

Biometric smartcard for enhanced security and performance

BioLock + Smartcard

Hardware + Software Specifications

Fingerprint Reader

BRS BioLock+ Reader model No. BL0004v01

- a touch sensor type utilizing RF scanning technology
- supports communications via 10BaseT and Wiegand
- installed on the non-secure side of the door while the SIOB is located on the secure side
- connection between the SIOB and Reader head is encrypted by a secure pairing, and when broken can only be re-enabled by resetting the pairing from the secure side of the building
- fully configurable Wiegand output formats including lengths 16-64, Bit positions, LSB or MSB ordering, Parity
- Authentication involving 1:1 matching between a presented fingerprint and a template stored on the smartcard
- matching read speed of less than 1 second
- remote access and internal log accessible via internal web interface
- NTP (Network Time protocol) and configurable TCP ports and IP address
- seamless integration with the BRS SmartCard Reader BL0045v01 to provide contactless smartcard operation.

Smartcard Reader *

BRS Smartcard Reader model No. BL0045v0

- 13.56MHz Contactless type smartcard
- communication between the smart-card and SmartCard Reader complies with ISO/IEC 14443 type A and has data transfer rates of at least 106Kbps, 212Kbps and 424Kbps
- the ability to read and write to the smartcard is supported
- a highly consistent reliable read range of up to 6cm when communicating
- modular by design and has the ability to operate as a standalone reader when in Mode 1 – CHUID verification, or operate as an integral part of the BioLock when operating in Mode 2 - CHUID Verification + Biometric User Authentication
- In Mode 1, the Reader is configured with an attached blanking plate (BRS part number CP0022v01)
- In Mode 2, the Reader has a seamless integration with the BRS BioLock BL0004v01 to provide contactless smartcard with biometric 1:1 matching
- messages are transmitted via a Wiegand output from the Reader to the PACS

Card Specifications

BRS Contactless SmartCard model No. CP0115v01

- 13.56 MHz contactless smartcard conforming to communications protocol ISO 14443/1-4 Type A
- minimum of 4kb EEPROM user memory
- blank, white and printable
- magnetic stripe not required

* Available September 2009

For further information please contact: Bio Recognition Systems Pty Ltd
PO Box 4102, Lane Cove 1595 Australia
Ph: +61 2 9882 8600
Fax: +61 2 9427 2503
Email: sales@brsgrp.com
Web: **www.brsgrp.com**

Australian owned. Australian made.

The products in this document are all trademarks of Bio Recognition Systems Pty Ltd. All information shown on this brochure is deemed to be accurate at time of printing. Bio Recognition Systems Pty Ltd reserves the right to change any specification and pricing without notice including discontinuing manufacture. © Copyright 2009 by Bio Recognition Systems Pty Ltd. All rights reserved. Printed in Australia. Rev: June 2009.