







## **FUSION FINGERPRINT READER DATASHEET**

Part No. 04-301

Borer's networked Biometric Fingerprint Reader provides the highest levels of secure authentication supporting one, two or three factor authentication (Card Only, Card plus Fingerprint, Card plus PIN or Card plus PIN and Fingerprint).

On enrolment the Biometric Template is stored on the card in an encrypted format. When the card is presented to the reader to gain access, the cardholder's access credentials are first checked before a fingerprint template is read from the card's memory. This is then checked against a live scan of the cardholder's finger before granting access.

This approach is self contained and can be used where network access to the Access Identity Management database is missing by design or because of a LAN failure.

The FUSION reader provides the system operator with a unique Identity Access Management approach that combines security, user convenience, cost-effective delivery and secure three factor authentication.

## **Features**

Space for up to Eight Different Biometric Templates in the Identity Access Card's Secure Memory supporting a mix of biometric technologies.

**Secure Biometric Templates and Cardholder Details** as cardholder data is fully encrypted using AES encryption.

**Support for an Unlimited Number of Cardholders** as biometric templates are read from the card carried by the cardholder and checked one to one with the live fingerprint.

**Independent of a Central Database** providing biometric authentication even when the readers are working stand alone and disconnected from the network and database.

**ISO** and ANSI formatted Biometric Fingerprint Templates which ensure interoperability with other ISO and ANSI compliant sensors ensuring continuity of supply by eliminating dependency on any one sensor manufacturer.

**User Programmable Open Format Desfire cards** which unlike systems that use propriety and exclusive formats, eliminates single supplier dependency and benefits the user with lower cost for replacement cards.



## Benefits

Delivers the Highest Level of Secure Access Authentication for access control applications.

Address Staff Privacy Concerns as biometric fingerprint templates are only stored in the memory of the card, which is held by the cardholder.

**Distributed Intelligence** enables biometric identities to be checked and access decisions to be made at the point of access.

**Dual Database of Cardholders and Access Rights** held at every reader head, allowing fall back to the last known good database in the event of a data corruption or network interruption during database download.

**Future Proof** with firmware updates downloaded directly to the reader head over the LAN enabling new biometric sensor technology and new smart card standards to be supported as and when they are introduced.

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Technical	
Installation:	Borer access control readers come with a matching backbox for surface mounting or can be mounted directly on to a single width electrical box
Colour:	Black
Power Supply:	220mA quiescent, 300mA @ 12 Volts DC
Dimensions/Weight:	120 x 78 x 26 mm / 190g
Installation Range:	Potted with rubber compound suitable for indoor installation
Reader Status Information:	Polyphonic tones, Two tri-state colour LEDs and tamper sensor
Cable Termination:	300mm pigtail - 4 Wire (2 Data   2 Power) to Lock Manager/Power Adaptor
Reader Database:	48 sets of reader rules, 16 scheduled holiday dates, 2 x 15,000 cardholders/transactions (Version 1), 2 x 60,000 cardholders/transactions (Version 2), 14 timezones
Data Retention without Power:	10 years
Network Connections:	Controller Area Network (CAN), ISO 11898 standard for serial data communications
Cable Type:	CAT5e/6 Cable, Max. cable length 300m from Midspan Bridge
Transmission Protocol:	CSMA-CA (Carrier Sense Multiple Access with Collision Avoidance)
Operating Temperature Range:	-25 to 60 C (-13 to 140 F)
Read Range:	Up to 80mm for Mifare and 40mm for DESFire; range may vary with token type and installed environment
Smart Card Technology:	DESFire (13.56mHz) ISO 14443A and 7816-4 Standard cards or tokens
Sensor Technology:	High-performance optical sensor (500 dpi) with false acceptance rate (FAR) up to 10 <sup>-8</sup>
Fingerprint Technology:	Compliance with ISO SC37 19794-2, ANSI/INCITS 378

