

**Borer's networked FUSION Biometrics Fingerprint PIN 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 biometric 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 MIFARE® 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, 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 over the LAN enabling new biometric sensor technology and new smartcard standards to be supported as and when they are introduced.

Power Over Ethernet Technology - Delivering both Power and Data over CAT5e/6 - Green Clean Design

## Technical

<b>Installation:</b>	Borer access control readers come with a matching backbox for surface mounting or can be mounted directly on to a single width electrical box
<b>Colour:</b>	Black
<b>Power Supply:</b>	220mA quiescent, 300mA @ 12 Volts DC
<b>Dimensions/Weight:</b>	130 x 81 x 43 mm / 240g
<b>Installation Range:</b>	Potted with rubber compound suitable for both indoor and outdoor installation
<b>Reader Status Information:</b>	Polyphonic tones, Two tri-state colour LEDs and tamper sensor
<b>Cable Termination:</b>	300mm pigtail - 4 Wire (2 Data   2 Power) to Lock Manager
<b>Reader Database:</b>	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
<b>Data Retention without Power:</b>	10 years
<b>Network Connections:</b>	Controller Area Network (CAN), ISO 11898 standard for serial data communications
<b>Cable Type:</b>	CAT5e/6 Cable, max. cable length 300m from Midspan Bridge
<b>Transmission Protocol:</b>	CSMA-CA (Carrier Sense Multiple Access with Collision Avoidance)
<b>Operating Temperature Range:</b>	-25 to 60 C (-13 to 140 F)
<b>Read Range:</b>	Up to 80mm for MIFARE® and 40mm for DESFire®; range may vary with token type and environment
<b>Smart Card Technology:</b>	DESFire® (13.56MHz) ISO 14443A and 7816-4 standard cards or tokens
<b>Sensor Technology:</b>	Optical sensor with false acceptance rate (FAR) up to 10 <sup>-8</sup> , longer lifetime and secure data transmission
<b>Fingerprint Technology:</b>	Compliance with ISO SC37 19794-2, ANSI/INCITS 378

