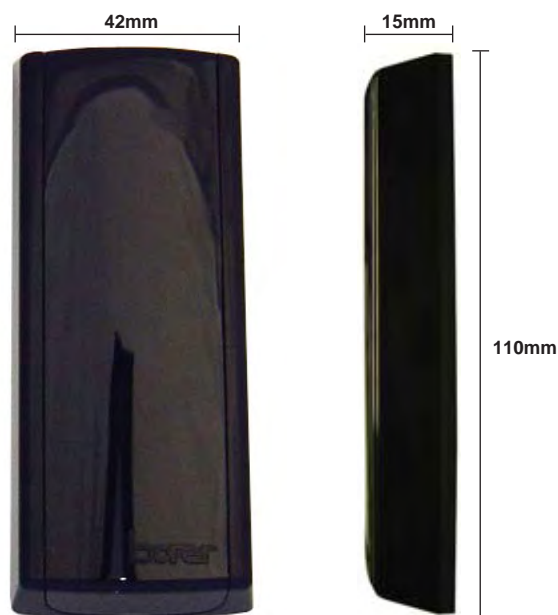


**Borer's Intelligent FUSION SMART CARD Reader is designed as a complete door entry solution for use in online access control applications.**

The reader has full online and offline card validation and decision making capabilities at the point of entry, eliminating the need for a separate control panel, wall box and mains power supply at each door.

The elimination of unnecessary equipment together with a low energy profile delivers a '*Cleaner, Leaner and Greener*' solution, reducing lifetime cost of ownership.

Support for open standard (ISO 14443A and B - Mifare and Desfire, ISO 15693) technologies where a single card can be used for a range of applications including: banking, travel card, cashless vending, access control and attendance recording.



### Features

Part No. 04-202

**Complete Single Door Access Control Solution** in one reader head

**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

**Large Database** with a capacity of up to 120,000 card holders/transactions

**Secure Database**, all cardholder details are fully encrypted to prevent manipulation or misuse of data

**Two bicolour LEDs and polyphonic sounder** gives clear feedback when a card is presented

**Works with Borer Midspan Bridge** technology which delivers power and data over a single CAT5e/6 cable

**'Power over Ethernet' Technology manages energy supply to the lock**, extends the lock life and reduce the amount of energy consumed at the door by up to 80%

### Benefits

**Developed using 'Clean Design' principles** to reduce component count and energy consumption

**'Plug and Play'** makes for faster installation & commissioning

**Distributed Intelligence** allows decisions to be made at the point of access

**TCP/IP Network Connection** via Borer Bridge facilitates direct connectivity to the access central management system and database

**Energy Savings of up to 80%** - Save on ongoing operating costs over the lifetime of the system

**Eliminates the Need** for a separate control panel, wall box and power supply reducing component count, bespoke cabling requirements and installation complexity and associated costs

**User Programmable open format Mifare cards** which, unlike systems that use proprietary and exclusive formats, eliminates single supplier dependence and benefits the user with lower cost for replacement cards

**Future Proof** - Firmware updates can be automatically downloaded directly to the reader head over the LAN enabling new smart card standards to be supported when they are introduced.

## Technical

<b>Installation:</b>	Borer access control readers for mullion mounting
<b>Colour:</b>	Black
<b>Power Supply:</b>	60mA quiescent, 90mA peak @ 12v DC
<b>Dimensions/Weight:</b>	110 x 42 x 15 mm / 55g
<b>Installation Range:</b>	Potted with rubber compound suitable for both indoor and outdoor installation
<b>Reader Status Information: Cable Termination:</b>	Polyphonic tones, Two tri-state colour LEDs and tamper sensor 300mm pigtail - 4 Wire (2 Data   2 Power) to Lock Manager/Power Adaptor <b>Red:</b> +12v (Supply), <b>Black:</b> 0v (Ground), <b>Green:</b> CAN High, <b>White:</b> CAN Low Match with corresponding colours to the Lock Manager/Power Adaptor
<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>	13° to 140° F (-25 to 60° C)
<b>Read Range:</b>	Up to 80mm; range may vary with Mifare token type and installed environment
<b>Smart Card Technology:</b>	Mifare (13.56mHz) ISO 14443A, ISO 14443B and ISO 15693 Standard cards or tokens

## Borer Installation Made Simple

