Symmetry™ Blue
Bluetooth Access Control Readers
Datasheet

KEY FEATURES

- Multi-tech readers (LF, HF, BLE or HF only, BLE) that provide the widest compatibility with multiple credential types

- Available with various comms interfaces: OSDP + Wiegand, 20mA (MCLP), F2F

- Available in various form factors: Keypad, Wall Switch, Mullion

- Designed to work across the whole Symmetry product range but also supports standard/open communications protocols for use with other access control systems

- No third-party portal or licensing required

- Works with most Android or Apple smart phones

- Fits standard electrical back boxes

- Reads MIFARE, DESFire, EV1 & EV2, LEAF, 125khz proximity cards.

- Supports DESfire EV3 cards in backwards compatibility mode

- Managed and self-managed key options for physical card encryption

- Configurable reader signal strength, can read Bluetooth BLE credentials from close-up and long range

- Suitable for indoor or outdoor installation

- Integrated door pre-held warning buzzer

- Light bar feedback for card accepted or rejected

- Keypad models: Optional PIN for higher security

One of the latest innovations in access control is the use of an Android or iOS smart phone in place of a physical access card. The new AMAG readers address that trend with a secure and cost-effective solution.

The Symmetry Blue reader range combines Bluetooth Low Energy (BLE) with conventional card reading capabilities for integrated access control.

The Symmetry Blue readers work with Symmetry apps for Android and iOS using suitable smart phones. They read NXP MIFARE, DESFire smart cards, 125khz proximity cards and Bluetooth credentials.

In addition to being designed to work with AMAG's software and controllers, the readers also work with any controller supporting industry standard Wiegand or OSDP communications. F2F and AMAG's 20mA (MCLP) communications are also available.

The Symmetry apps and virtual (mobile) credentials are free of charge and do not require a license. Enrollment of smart phones with the Symmetry system is straightforward and does not require a separate portal or third-party subscription.

Users can be provided with either a physical card, the app on their smart phone or both. Mobile phone credentials can be recorded within the Access Control Software as separate credentials and can share the same access rights as a physical card.

Enrollment is either through USB encoder or by input of the virtual credential identifier, which is viewable through the mobile app. Symmetry additionally provides the ability to create credentials within the access control system and then encode them as virtual credentials on mobile devices (requires the 937-USB model encoder).

Symmetry Blue readers can be installed in place of an existing card reader or alongside it for situations where existing card technology is not being changed.

MODELS

Keypad Readers

939S-KP	Keypad reader, Wiegand + OSDP, LF, HF, BLE
939F-KP	Keypad reader, F2F, LF, HF, BLE
939M-KP	Keypad reader, 20mA (MCLP), LF, HF, BLE

Wall Switch Readers

939S	Wall Switch reader, Wiegand + OSDP, LF, HF, BLE
939F	Wall Switch reader, F2F, LF, HF, BLE
939M	Wall Switch reader, 20mA (MCLP), LF, HF, BLE

Mullion Readers

929S	Mullion reader, Wiegand + OSDP, LF, HF, BLE
929F	Mullion reader, F2F, LF, HF, BLE
929M	Mullion reader, 20mA (MCLP), LF, HF, BLE
924S	Mullion Reader, Wiegand + OSDP, HF **_ONLY_**, BLE

USB Encoders

936-USB	iOS/Android phone enrollment (ONLY) from all Symmetry versions
937-USB	iOS/Android phone enrollment and ENCODING for use with Symmetry version 9.1 or later

SPECIFICATIONS

Dimensions – Wall Switch and Keypad

- Width = 3.3" (83mm)
- Height = 5.1" (130mm)
- Depth = 0.8" (18mm)
- Pigtail = 18.0" (457mm)

Dimensions – Mullion

- Width = 1.7" (43mm)
- Height = 5.1" (130mm)
- Depth = 0.8" (18mm)
- Pigtail = 18.0" (457mm)

Dimensions – USB

- Width = 3.0" (76mm)
- Height = 3.0" (76mm)
- Depth = 0.6" (15mm)

Keypad   **Wall Switch**

USB Encoder

Mullion

SPECIFICATIONS

Communication Distances

- Symmetry Door Controller to Symmetry Blue Reader = 500ft (150m)

  - Wiegand = 500ft (150m)

  - OSDP = 2,000ft (12V power at reader with twisted pair cabling)

  - MCLP = 1,000ft (12V power at reader with twisted pair cabling)

- Typical configurable read range (dependent upon phone model)   1 inch to 16 feet.

Operating Environment

- -40°F to +158°F (-40°C to +70°C)

- IP55 Rated

Power Requirements

- Nominal 12VDC

- Maximum current consumption 190mA (average 150mA or less)

Software Versions

- Android 5 or later

- iOS 8 or later

APPROVALS

Radio Regulatory Approvals

- FCC Part 15

- IC RSS

EMC Type Testing

- EN301489

- EN302291 (13.56 MHz)

- EN300330 (125 KHz)

Access Control Product Testing

- UL294