

## Product Overview

The Symmetry S813 reader combines the BioCrypt® MV1200™ fingerprint sensor with a Philips MIFARE® / MIFARE® DESFire contactless Smart Card chip to produce a high security front end to a Symmetry access control system. The Smart Card is used to store a fingerprint template, so that when the card is presented to the reader, the template is read from the card and the user is prompted to place their finger on the fingerprint sensor. A comparison is then made between the live fingerprint and the stored fingerprint and if the two match, access is permitted.

The Symmetry S813 is able to read Philips® MIFARE® and Philips® MIFARE® DESFire smart cards. For either type of card, the Symmetry S813 supports the use of unencoded cards (where only the unique card serial number is read), or cards encoded with a card number and optional biometric data. Several encoding formats are supported. The reader can simultaneously support two different card types/formats (e.g. non-encoded MIFARE and smartMAX-encoded MIFARE DESFire, or non-encoded MIFARE and smartMAX-encoded MIFARE). The reader is automatically configured to accept the first two card types/formats presented.

The Symmetry S813 has the flexibility to automatically switch between a number of different operating modes.

- No Finger - Operates as a normal contactless Smart Card reader.
- One Finger - The use of only one finger only is required for a match comparison with the template stored in the Smart Card.
- Two Finger - Two templates are stored in the Smart Card and the user must present both fingers as prompted by the LCD display for a match comparison.

The Symmetry S813 has a fingerprint acceptance threshold on a per cardholder or per reader basis. A duress capability is also standard. The Symmetry S813 is designed for use with the complete multiNODE range of database and door controllers.

The Symmetry S813 is compatible with Symmetry Business, Symmetry Professional, Symmetry Enterprise and Symmetry Global at Version 4.02 and later, with controller firmware of Version 2.1 or later.

Unlike standard Wiegand interface readers, the Symmetry S813 uses secure, bi-directional, pseudo-random supervised communications between the multiNODE controllers and their associated readers. This advanced protocol provides many



benefits such as the ability to turn on and turn off the fingerprint requirement from anywhere on the system using a command at the reader, a special threat level card or from the client software. Also achieved through this integration is the ability to encode and use the threshold directly on the card to increase reliable throughput and security. A distance from any of the multiNODE controllers to the Symmetry S813 reader of up to 3000 feet (1000m) can also be achieved.

The Symmetry S813 includes an LCD for verification of both card and fingerprint read. The LCD is also used for card PIN prompt and for verification of command functions initiated through the reader keypad. The Symmetry S813 has an integrated buzzer for confirmation of card read and local door pre-held warning alarms. This integrated buzzer is also used to give audible feedback for positive confirmation of key press for card PIN entry.

## Key Features

- BioCrypt MV1200 fingerprint sensor
- Typical MIFARE/MIFARE DESFire Smart Card read range of 1" (2.5cm)
- Supervised, bi-directional pseudo-random communications
- Integrated door pre-held warning buzzer
- Audible feedback provides positive confirmation of card read and key press
- LCD verification of both card and fingerprint accepted/rejected
- LCD is also used for card PIN prompt and to give verification of command functions initiated through the reader keypad
- Two Fingerprint mode
- Duress mode



# Symmetry S813

## Combined Fingerprint and Smart Card Reader

[www.amag.com](http://www.amag.com)

### Specifications

#### Model Types

- S813 Fingerprint and Smart Card Reader
- Available in ash gray

#### Communicating Distances

- multiNODE-1000/multiNODE-2 SMD/multiNODE-2000/  
multiNODE 2100/ multiNODE 2150 controllers to:  
Symmetry S813 (current loop) = 3000ft/1000m

#### Dimensions inches (mm)

- Width = 6.8" (173.2mm)
- Height = 5" (127.5mm)
- Depth = 1.9" (49.13mm) at deepest point



#### Operating Environment

- 32°F to +122°F (0°C to +50°C)
- 15% to 90% Humidity, non condensing IP605
- For Internal use only

#### Power Requirements

- Nominal 12VDC (9-14V)
- Maximum current consumption 200mA

#### Approvals

- FCC Approved
- Radio regulatory approvals to EN 300 330:1999
- EMC Immunity Testing to EN50130-4
- EN 60950:2000
- EN 50357
- Access control product testing to EN 50133-1:1997
- R & TTE Directive 1999/5/EC

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