



## Symmetry™ S849 Contactless Smart Card Reader Datasheet

### KEY FEATURES

- MCLP or Wiegand controller communications
- Reads both NXP MIFARE and MIFARE DESFire smart cards
- Supports DESfire EV3 cards in backwards compatibility mode
- Secure, bi-directional, pseudo-random supervised communications
- Maximum read range of up to 2" (50mm)
- Integrated door pre-held warning buzzer is included
- Audible feedback provides positive confirmation of card read and key press
- LED for verification of card accepted and card rejected

The Symmetry S849 is a contactless smart card reader with LED and keypad designed to read NXP® MIFARE® and MIFARE® DESFire smart cards.

MIFARE DESFire operates at a maximum distance of 2" (50mm) and in accordance with the international standard ISO 14443, and perfectly meets mid-end segment needs including security and cost effectiveness. DESFire cards feature high-speed triple-DES data encryption to guarantee data integrity during contactless transactions.

The Symmetry S849 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 S849 is designed for use with the multiNODE-2, multiNODE-2100 and multiNODE-2150 controllers and is compatible with Symmetry Professional, Symmetry Enterprise and Symmetry Global Software at version 6.0 and later.

The Symmetry S849 uses MCLP (multiNODE Current Loop Protocol), secure, bi-directional, pseudo-random supervised communications between the multiNODE controllers and their associated readers. Both the reader and cable are supervised, and an alarm will sound if the reader is tampered with, or communications lost. A Wiegand output is also provided to link the S849 to other access control panels.

A distance from the multiNODE controller to the Symmetry S849 of up to 3000 ft (1000m) using MCLP or 300 ft (100m) using Wiegand can be achieved.

Other key reader features include LEDs for visual indication of card accepted or card rejected and an integrated buzzer for card read and door pre-held warning.



## SPECIFICATIONS

### Model Types

- Smart card reader
- Available in ash gray

### Software

- The Symmetry S849 is compatible with Symmetry Professional, Enterprise and Global Software at version 6.0 or later
- Wiegand output format and keypad transmission format

### Communicating Distances

- multiNODE-2/multiNODE-2100/multiNODE-2150 controllers to Symmetry S849 (current loop) = 3000 ft (1000m)
- Wiegand = 300 ft (100m)

### Dimensions Inches (mm)

- Width = 3.8" (97mm)
- Height = 4.9" (125mm)
- Depth = 1.8" (45mm)

### Operating Environment

- -20°C to +70°C (-4°F to +158°F)
- 15% to 90% humidity, non-condensing
- Optional cold weather kit recommended when mounting outdoors

### Power Requirements

- Nominal 12VDC (9-14V)
- Maximum current consumption 80mA



## APPROVALS

### Radio Regulatory Approvals

- FCC CFR47 Part 15.209
- EN 300 330 - v1.3.1

### EMC Type Testing

- EN301489

### Access Control Product Testing

- IP54 - R & TTE Directive 1999/5/EC

## PURCHASING INFORMATION

- 849-KP-AG ash gray