AMAG TECHNOLOGY™
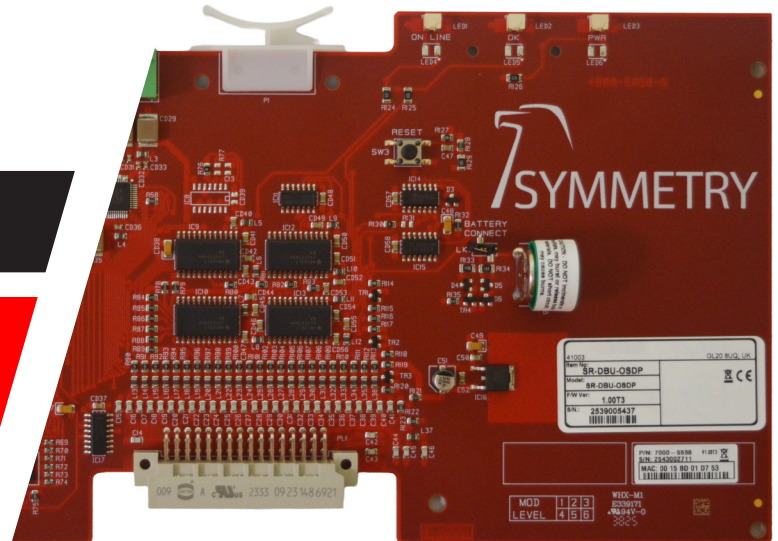
DATASHEET

Symmetry™ SR

Retrofit Controllers

Key Features

High-density solution for new or retrofit access control

Connects to Symmetry security management software via LAN, WAN, RS232

AES (128 or 256 bit) encrypted communications to Symmetry supported over LAN/WAN

Each SR-DBU can manage up to 16 doors and card readers

Modular mix and match configuration using plug-in circuit boards

Connect smart card, proximity, or legacy magstripe card readers

Onboard support for up to 8 Wiegand card readers when using SR-DC2 modules

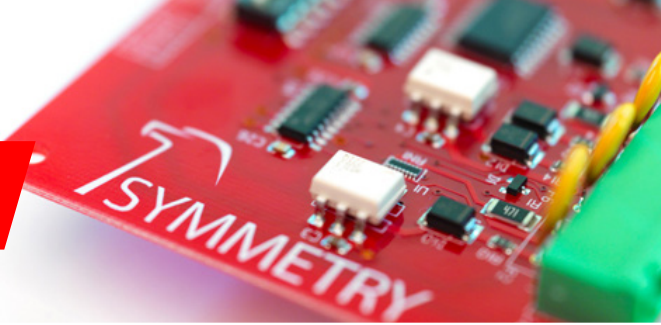**Support for serial-connected chains of up to 32 SR-DBU's –minimize consumption of network resources**

Product Overview

The Symmetry SR series hardware offers the latest in Symmetry controller technology in a form factor that allows installation in unique locations for new and retrofit applications.

Utilizing a pluggable backplane architecture, the SR series provides a high-density solution for up to 16 doors in a compact enclosure. This form factor is ideal for upgrading legacy equipment to a state-of-the-art Symmetry solution.

Fully interoperable with the multiNODE M2150 and EN series of controllers, the SR series provides distributed intelligence for your access control system and ensures complete system security, resilience and reliability. When integrated with Symmetry Security Management Software, the SR range delivers a seamless security management system to protect all types of facilities while maintaining a low cost of ownership.

At the core of every SR series installation is the SR-DBU, a Fault Tolerant controller with built in database and support for plug-in modules supporting up to 16 card readers. Expansion of the system is simple using plug-in door controllers and input/output modules. Expansion beyond 16 doors is achieved by installing additional SR cabinets as required, providing solutions that can scale up to an unlimited number of doors. Each SR-DBU can manage 200,000 cardholders, but there is no limit to the number of cardholders a system can support.

The Symmetry SR series provides a Fault Tolerant access control solution that will continue to operate in the unlikely event of database server or network infrastructure failure. All configuration and badge information needed for operation is stored in battery backed memory on the SR-DBU, ensuring that even in the event of a total loss of power the system will return to full operation as soon as power is restored.
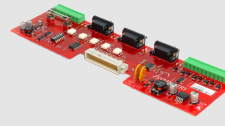
SR-2000 Controller

Each SR controller supports 20,000 cardholders (expandable to 250,000) and up to 16 card readers with the addition of optional door controllers. Includes integrated RS232 port. Door input and output controllers connect using RS485. Optional network interface modules are able to provide LAN or wireless access. See price list for models including enclosure and 3.5A 12VDC power supply (20VAC or 24VDC input). Also available with fitted transformer. See price list for details. A handgeometry variant is available.

SR-DBU Database Unit and SR-PCU Interface Module

When plugged into the backplane of an SR series or compatible legacy enclosure, these two modules form the heart of each controller unit. The SR-DBU database unit performs all processing and data management and supports 200,000 cardholders and door controllers supporting up to 16 card readers. Includes integrated 10/100 Ethernet port. The SR-PCU conditions and monitors power to all modules and provides upstream and downstream communication ports for the controller.
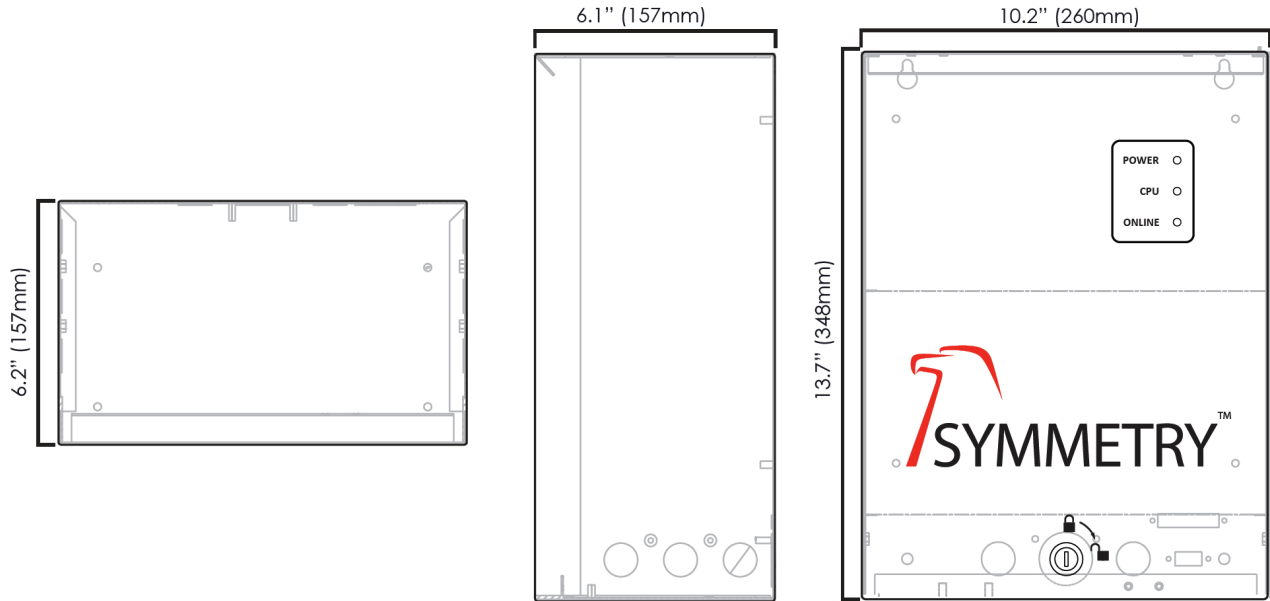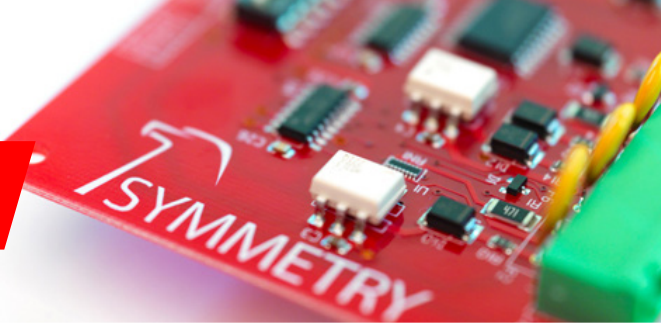
SR-DBU

SR-PCU

Reference	Description	Functions
SR-DBU	Database Controller with Ethernet	Main processor unit, Non-volatile configuration and badge database; 10/100 Ethernet interface with switchable AES encryption included; Supports chaining to up to 31 additional downstream SR-DBU's
SR-PCU	Interface Module for SR-DBU	Serial interfaces for upstream, downstream; Power distribution and regulation; Inputs for power supply and tamper switch monitoring
SR-DBU-OSDP	Database Controller with Ethernet	Main processor unit, Non-volatile configuration and badge database; 10/100 Ethernet interface with switchable AES encryption included; Supports chaining to up to 31 additional downstream SR-DBU-OSDP's

**Symmetry™ SR
Retrofit Controllers**

6.1" (157mm)

10.2" (260mm)

POWER ○

CPU ○

ONLINE ○

6.2" (157mm)

13.7" (348mm)

SYMMETRY™

SR Series Door Controller/Interface Modules

The SR-DC2 is a flexible 2-door controller that can be used with a variety of reader types. It provides all necessary I/O for a complete solution for 2, 4, 6, or 8 controlled doors per cabinet. For retrofit applications with F/2F(1) readers and devices already installed, the SR-DC8 provides a plug-and-play upgrade path to a Symmetry solution. One or two SR-DC8 modules may be installed in each SR Series or compatible legacy enclosure, providing support for up to 16 doors.

Reference	Description	Application	Doors	Reader Types	Max Number Per Enclosure	I/O (per door)
SR-DC8-OSDP	Door controller	New installations, Retrofits	2	Wiegand, OSDP, supervised OSDP	4 (8 doors)	Serial interfaces for upstream, downstream; Power distribution and regulation; Inputs for power supply and tamper switch monitoring
SR-DBU-OSDP	F/2F interface	Retrofits	8	OSDP, supervised OSDP	2 (16 doors)	Reader LED/strike solid state output only (requires external relay)

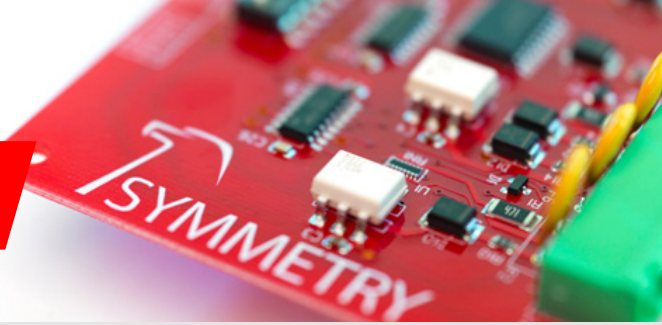📞 1-800-889-9138 | ✉ international@amag.com | 🌐 www.amag.com

Symmetry™ SR
Retrofit Controllers

Reference	Description	Application	Doors	Reader Types	Max Number Per Enclosure	I/O (per door)
SR-DC2	Door controller	New installations, Retrofits	2	Wiegand, F/2F(1), ,supervised F/2F(1)	4 (8 doors)	Door position switch input (supervised or unsupervised); Request-to-exit switch/sensor input (supervised or unsupervised); door strike/lock relay output, bypass relay output, auxiliary relay output; reader LED/strike solid state output
SR-DC8	F/2F interface	Retrofits	8	F/2F(1), supervised F/2F(1)	2 (16 doors)	Reader LED/strike solid state output only (requires external relay)

(1) F/2F is a term used by UTC Climate, Controls & Security, and formerly by GE Security and CASI-Rusco, to describe a non-standard reader interface.
(2) Future capability to be enabled by Symmetry and/or firmware update.
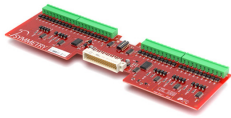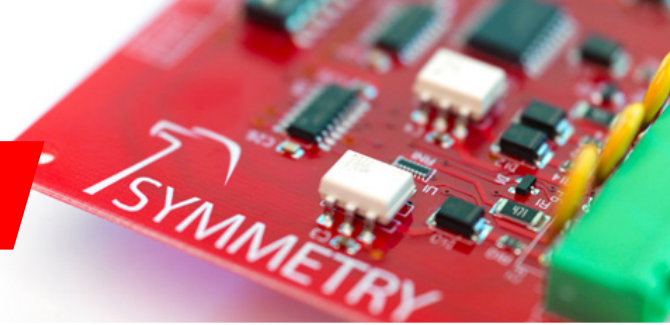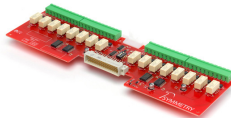
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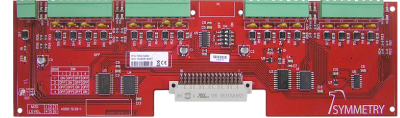
Symmetry™ SR
Retrofit Controllers

SR-AC20

SR-AC20

Input and Output Modules

Plug-in input and output modules install in the SR Series or compatible legacy enclosure to provide additional inputs and outputs. Up to four SR-OC16 modules or SR-AC20 modules are supported in each enclosure.

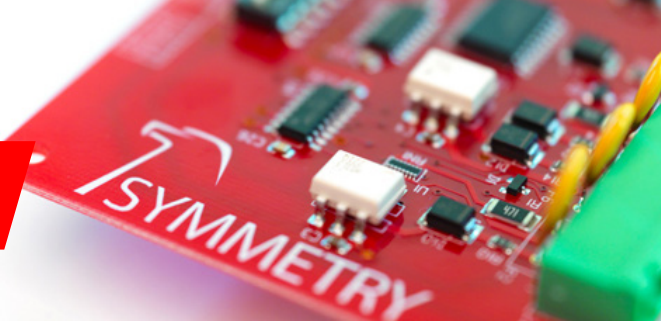| Reference	Description	Inputs	Outputs	Functions
SR-AC20	Auxiliary digital input module	20	0	20 auxiliary inputs supporting supervised or unsupervised inputs
SR-OC16	Auxiliary relay output module	0	16	16 auxiliary relay outputs
SR-OCS16	Auxiliary solid-state module	0	16	16 solid-state outputs

Kits and Accessories

Starter kits are available for new installations and retrofits.

Reference	Description	Recommendation
SR-SCK5	Starter kit with SR-ENC5 enclosure, SR-DBU and SR-PCU boards	Main processor unit, Non-volatile configuration and badge database; 10/100 Ethernet interface with switchable AES encryption included; Supports chaining to up to 31 additional downstream SR-DBU's
SR-RFK5	Retrofit kit with SR-DBU, SR-PCU and cover with lock (no cabinet)	Retrofitting card-caged based systems with removable covers
SR-WIU	Wiegand to F2F reader convertor for USB with DC8 or SR2000	Used to convert from an F2F to a Wiegand card reader
SR-OIU	OSDP Interface Unit	Used to connect OSDP readers, Door inputs & outputs to SR controller via OSDP

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Enclosure and Power Supply

The SR-ENC5 enclosure includes a card cage to securely install up to 7 SR series modules, a passive backplane to transmit signals between modules, and a pre-wired tamper switch. The removable cover provides easy access to the electronics and allows the unique power, status, and communication LED indicators on the SR-DBU to be viewed through translucent windows.
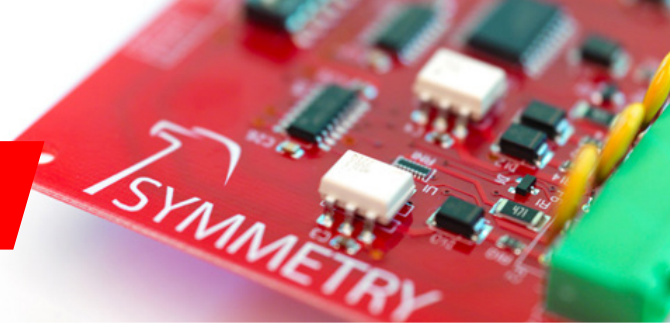
Reference	Description	Recommendation
SR-ENC5	Enclosure with card cage, backplane, cover with lock and pre-wired tamper switch	New installations with expandable architecture using SR-ENC5
SR-PSC6	6 Amp UL Listed power supply in enclosure	New installations and upgrades
SR-CV5	Enclosure cover with lock & keys, allows LED display	Fits legacy enclosures

Reference	Description	Application	Doors	Reader Types	Enclosure	Max Number Per Enclosure	I/O (per door)
SR-2000	Retrofit kit	Retrofits	4	F/2F(1), supervised F/2F(1)	Boards only	1 (4 doors)	Includes 10 inputs and 8 auxiliary outputs. Replacement for Casi Rusco M2000 controllers. No enclosure.
SR-2000-ENC2	Retrofit kit with enclosure	Retrofits	4	F/2F(1), supervised F/2F(1)	Boards with enclosure	1 (4 doors)	Includes 10 inputs and 8 auxiliary outputs. Replacement for Casi Rusco M2000 controllers. Enclosure included.

(1) F/2F is a term used by UTC Climate, Controls & Security, and formerly by GE Security and CASI-Rusco, to describe a non-standard reader interface.
(2) Future capability to be enabled by Symmetry and/or firmware update.

**Symmetry™ SR
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Specifications

✓ Management Software

Requires Symmetry Homeland,
Professional,or Enterprise version

Operating Environment

- +14°F to 131°F (-10°C to 55°C)
- 15% to 90% humidity, non-condensing

Communications

IP Network

- LAN interface (10/100 Mbps), selectable
  AES128or AES256 encryption
- Wiegand reader (SR-DC2 only)
  = 325 ft (99 m)
- F/2F(1) reader or device to controller
  = 500 ft(152 m)

Storage Capacities

- 200,000 cardholders and 16,000 transactions

Certification

- UL Listings: UL 294 (SR-DC2 / SR-OC16 /SR-
  OCS16 UL 294)

14.2'' (360 mm)   3.5'' (89 mm)

○ POWER
○ CPU
○ ONLINE

14.1'' (359 mm)

SYMMETRY

3.6'' (91 mm)

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