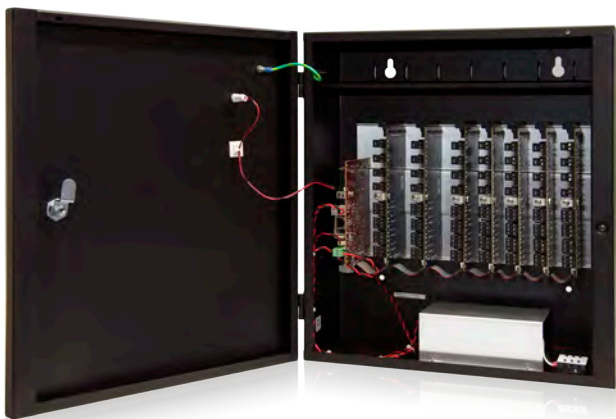# S2 Access Control Application Blade

Overview

S2 Access Control Application Blade is a dual–card reader interface board with reader, input and output points to support a wide range of devices. Of the four types of S2 Application Blades, the S2 Access Control Application Blade offers the largest variety of connections.

Each S2 Access Control Application Blade supports up to two doors or other access points, interfacing with Wiegand, magnetic stripe and keypad technologies. Compatible devices include REX, DSM, door controllers, alarms, card readers and more. Four inputs support normally open, normally closed, supervised and non-supervised circuits. Four output relays can be configured for fail–safe or fail–secure operation.

Up to seven S2 Application Blades in any combination can be supported by an S2 Network Node. S2 Application Blades are easy to install – S2 Nodes automatically recognize and address them without jumpers or switches. Power and communications are delivered to every S2 Application Blade via a ribbon cable bus, and the blade supplies 12VDC, up to 250mA per card reader.

Up to seven S2 Application Blades in any combination can be supported by an S2 Network Node.
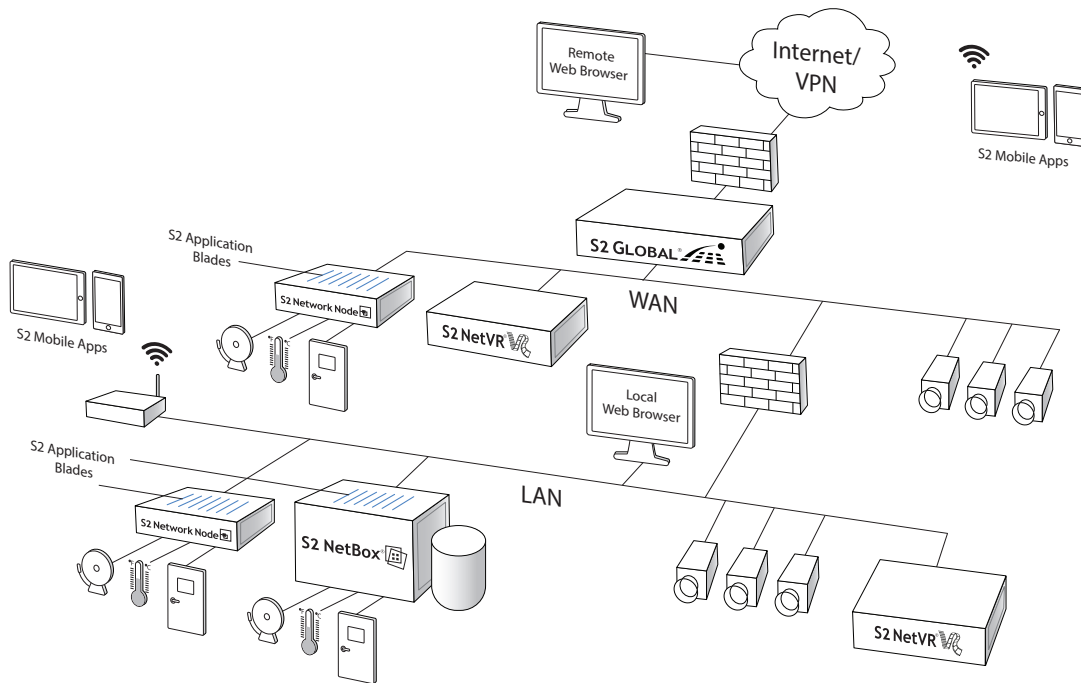
Key Features

Access Control

- **Portals**: Provides connections for up to two doors or other access points
- **Device Support**: Supports REX, DSM, door controllers, alarms, card readers and other devices
- **Reader Support**: Interfaces with Wiegand, magnetic stripe and keypad reader technologies
- **Input Configuration**: Includes four inputs configurable to normally open, normally closed, supervised and non-supervised circuits
- **Output Configuration**: Includes four output relays configurable for fail–safe or fail–secure operation

System

- **Automatic Discovery**: Automatically connects to S2 Node without jumpers or switches
- **Hardware Compatibility**: Fits available blade slots in S2 NetBox®, S2 NetBox VR Quatro, S2 Network Node and S2 Network Node VR hardware

Schematic only. Not a network diagram.

Specifications – S2 Access Control Application Blade

Access Control

Readers	2
Reader Compatibility	Wiegand Data0/Data1
Supervised Inputs	4
Input Supervision	Quad State (Open / Short / Normal / Alarm) Resistors value = 1K
Selection per Input	Dual Resistor / Single Series Resistor / Single Parallel Resistor / Unsupervised
Input Circuit Types	2-pin supervised
Outputs	4
Output Description	Dry, Form C, single-pole double-throw (C / NO / NC) contacts for load switching

General

DC Input	12VDC, supplied via ribbon cable connection from S2 Node
Relay Contact Rating	30VDC/AC, 2.5A inductive or 5.0A non-inductive
Reader Power	12VDC, 250mA/reader maximum
Dimensions (H, W, D)	7.5in x 4.0in x 0.83in (191mm x 102mm x 21mm)
Weight	6.77 oz (192 g)
Operating Temperature	32°F – 95°F (0°C – 35°C)

General (continued)

Storage Temperature	-4° – 158°F (-20° – 70°C)
Operating Environment	Humidity 85%, non-condensing 35° C
Regulatory Approvals	UL, CE, RoHS
Warranty	2 years hardware

Cabling Requirements

Reader Cable	Twisted, shielded, Belden 5304UE - 18 AWG (6 conductor) or equivalent
Max Reader Cable Distance	500ft (152m)
Supervised Input Cable	Twisted, shielded 22 AWG Belden #9462
Max Supervised Input Cable Distance	2000ft (610m)
Relayed Output Cable	Twisted, shielded 22 AWG Belden #9462 or equivalent
Max Relayed Output Cable Distance	Determined by the peripheral device

Part Numbers

S2-ACM	Access control application blade with support for 2 readers, 4 inputs and 4 outputs

For more information, please visit www.s2sys.com.

S2 SECURITY