SNAP-SCM-W2 MODULE

Features

- Two individually isolated Wiegand interface serial ports
- Works with SNAP Ultimate I/O, SNAP Ethernet I/O, and SNAP-IT units
- Up to eight Wiegand modules per rack
- LED indicators for received data on each port
- Sample ioControl strategy and Visual Basic utility available
- 30-month warranty.

SNAP-SCM-W2 Module

DESCRIPTION

The SNAP-SCM-W2 serial communication module provides two isolated channels of data input from attached devices that comply with the Wiegand® interface format.

Ideal for access control applications, the SNAP-SCM-W2 complies with the Security Industry Association Standard Protocol for the 26-bit Wiegand Reader Interface. As part of a SNAP I/O™ system, the module lets you manage access to rooms, equipment, or remote facilities.

The SNAP-SCM-W2 can be used with Opto 22's SNAP PAC R-series controllers and SNAP PAC EB brains, both the standard wired models and the Wired+Wireless™ models.

The module receives incoming data from card readers, keypads, or other Wiegand devices. This data is processed by the brain and made available for use by authorized computers through any or all of the brain's communication protocols, including SNMP, SMTP, FTP, Opto 22's OptoMMP memory map-based protocol, Modbus/TCP, and EtherNet/IP. When the module is used with a rack-mounted controller, incoming data from Wiegand devices can also be processed by a PAC Control™ strategy running on the controller.

The SNAP-SCM-W2 snaps into Opto 22 SNAP PAC mounting racks right beside digital, analog, and regular RS-232 or RS-485 serial modules, to provide the mix of modules you need for your application at any location, local or remote.

SNAP racks have a retention rail locking system. Use two 4-40 by ½-inch standard machine screws to hold each module securely in position on the SNAP rack.

For details on using the SNAP-SCM-W2 , see Opto 22 form #1191, the *SNAP Serial Communication Module User's Guide*.

Notes for legacy hardware: The SNAP-SCM-PROFI also works with older analog/digital/serial SNAP Ultimate, SNAP Ethernet, and SNAP Simple brains and M-series or B-series racks.

Sample Applications

Also available are two sample software applications: an ioControl strategy and a Visual Basic utility application. The strategy configures modules, processes card reader data, and sends SNMP traps for security monitoring. The utility manages user names and entry permissions.

The sample strategy can be used as is, or you can open it in PAC Control and modify it to fit your needs. Both samples can be downloaded from our website at www.opto22.com.

For information on the sample strategy and utility application, see form #1366, the Door Access Management technical note.

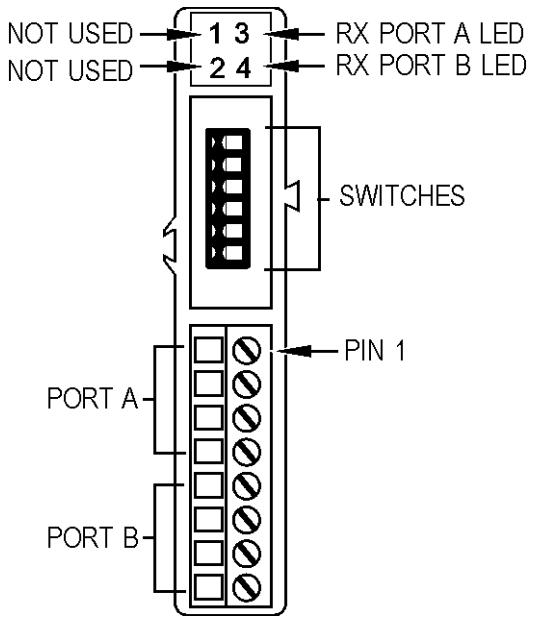
Part Numbers

Part	Description
SNAP-SCM-W2	Two-channel Wiegand interface serial communication module

Specifications

Channel-to-channel isolation	250 Vrms
Logic supply voltage	5.0 VDC (± 0.15)
Logic supply current	250 mA
Number of ports per module	2
Maximum number of modules per rack*	8
Maximum cable length	See table below
Processor compatibility	SNAP PAC R-series controllers and SNAP PAC EB brains, both standard wired and Wired+Wireless models. Also SNAP-B3000-ENET, SNAP-ENET-RTC, SNAP-ENET-S64, SNAP-UP1-ADS, and SNAP-UP1-M64.
Operating Temperature Storage Temperature	-20 to 70 °C operating -30 to 85 °C storage
Torque, hold-down screws	Not to exceed 1 in-lb (0.11 N-m)
Torque, connector screws	5.22 in-lb (0.59 N-m)
Agency Approvals	CE, RoHS, DFARS
Warranty	30 months

* With Opto 22 SNAP power supply and SNAP rack



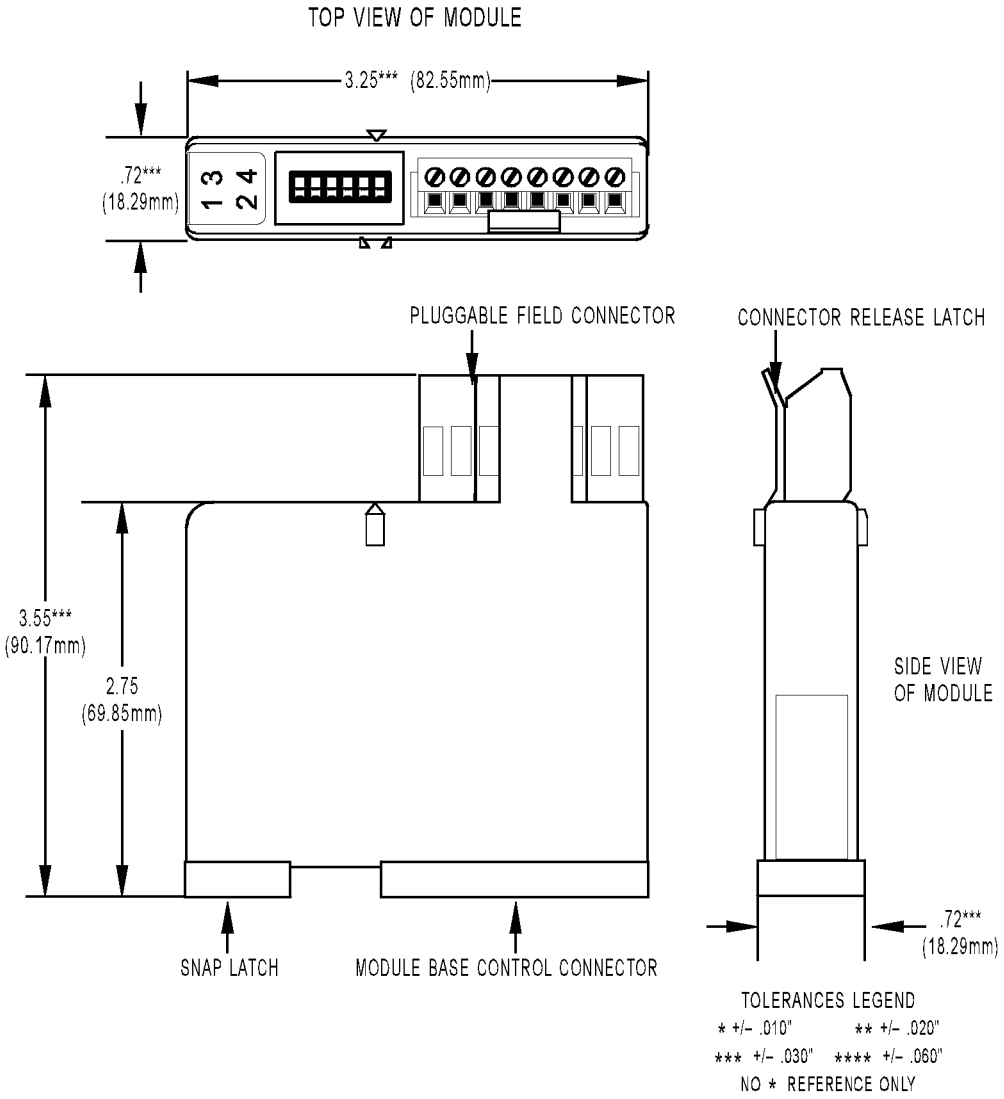
Cable Length	Conductor Size
Up to 200 ft. (60 m)	22 GA stranded or larger
Up to 300 ft. (90 m)	20 GA stranded or larger
Up to 500 ft. (150 m)	18 GA stranded or larger

LED	Indicates
1	Not used
2	Not used
3	RX port A
4	RX port B

For pinouts and additional information, see Opto 22 form #1191, the *SNAP Serial Communication Module User's Guide*.

DIMENSIONS

SNAP-SCM-W2 Wiegand Serial Communication Module



More about Opto 22

OPTO 22

PRODUCTS

Opto 22 develops and manufactures reliable, easy-to-use, open standards-based hardware and software products. Industrial automation, process control, remote monitoring, data acquisition, and industrial internet of things (IIoT) applications worldwide all rely on Opto 22.

groov RIO®

groov RIO edge I/O offers a single, compact, PoE-powered industrial package with web-based configuration and IIoT software built in, support for multiple OT and IT protocols, and security features like a device firewall, data encryption, and user account control.

Standing alone, *groov* RIO connects to sensors, equipment, and legacy systems, collecting and securely publishing data from field to cloud. Choose a universal I/O model with thousands of possible field I/O configurations, with or without Ignition from Inductive Automation®, or a RIO EMU energy monitoring unit that reports 64 energy data values from 3-phase loads up to 600 VAC, Delta or Wye.

You can also use *groov* RIO with a Modbus/TCP master or as remote I/O for a *groov* EPIC system.

groov EPIC® System

Opto 22's *groov* Edge Programmable Industrial Controller (EPIC) system gives you industrially hardened control with a flexible Linux®-based processor with gateway functions, guaranteed-for-life I/O, and software for your automation and IIoT applications.

groov EPIC Processor

The heart of the system is the *groov* EPIC processor. It handles a wide range of digital, analog, and serial functions for data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

In addition, the EPIC provides secure data communications among physical assets, control systems, software applications, and online services, both on premises and in the cloud. No industrial PC needed.

Configuring and troubleshooting I/O and networking is easier with the EPIC's integrated high-resolution color touchscreen. Authorized users can manage the system locally on the touchscreen, on a monitor connected via the HDMI or USB ports, or on a PC or mobile device with a web browser.

groov EPIC I/O

groov I/O connects locally to sensors and equipment. Modules have a spring-clamp terminal strip, integrated wireway, swing-away cover, and LEDs indicating module health and discrete channel status. *groov* I/O is hot swappable, UL Hazardous Locations approved, and ATEX compliant.

groov EPIC Software

The *groov* EPIC processor comes ready to run the software you need:

- Programming: Choose flowchart-based PAC Control, CODESYS Development System for IEC61131-3 compliant programs, or secure shell access (SSH) to the Linux OS for custom applications
- Node-RED for creating simple IIoT logic flows from pre-built nodes
- Efficient MQTT data communications with string or Sparkplug data formats
- Multiple OPC UA server options
- HMI: *groov* View to build your own HMI viewable on touchscreen, PCs, and mobile devices; PAC Display for a Windows HMI; Node-RED dashboard UI
- Ignition or Ignition Edge® from Inductive Automation (requires license purchase) with OPC-UA drivers to Allen-Bradley®, Siemens®, and other control systems, and MQTT communications

Older products

From solid state relays, to world-famous G4 and SNAP I/O, to SNAP PAC controllers, older Opto 22 products are still supported and working hard at thousands of installations worldwide. You can count on us for the reliability and service you expect, now and in the future.

QUALITY

Founded in 1974, Opto 22 has established a worldwide reputation for high-quality products. All are made in the U.S.A. at our manufacturing facility in Temecula, California.

Because we test each product twice before it leaves our factory rather than testing a sample of each batch, we can afford to guarantee most solid-state relays and optically isolated I/O modules for life.

FREE PRODUCT SUPPORT

Opto 22's California-based Product Support Group offers free technical support for Opto 22 products from engineers with decades of training and experience. Support is available in English and Spanish by phone or email, Monday–Friday, 7 a.m. to 5 p.m. PST.

Support is always available on our website, including free online training at OptoU, how-to videos, user's guides, the Opto 22 KnowledgeBase, and OptoForums.

PURCHASING OPTO 22 PRODUCTS

Opto 22 products are sold directly and through a worldwide network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at **800-321-6786** (toll-free in the U.S. and Canada) or **+1-951-695-3000**, or visit our website at www.opto22.com.

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