

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.

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-SCM-W2 Module

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

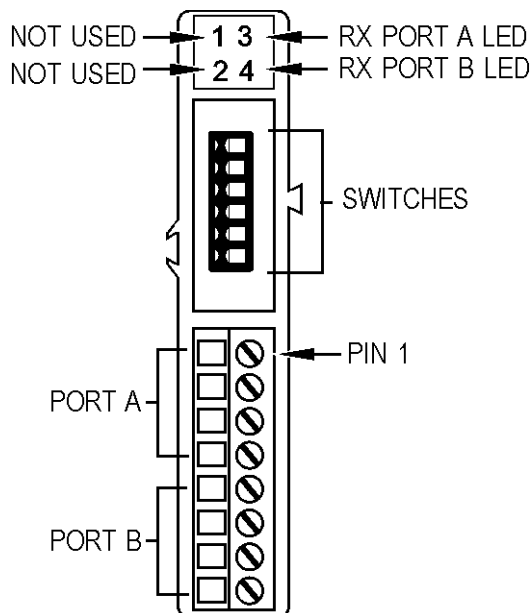
Part	Description
SNAP-SCM-W2	Two-channel Wiegand interface serial communication module

SNAP-SCM-W2 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	0 to 70 °C operating
Storage Temperature	-30 to 85 °C storage
Torque, hold-down screws	4 in-lb (0.45 N-m)
Torque, connector screws	5.26 in-lb (0.6 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

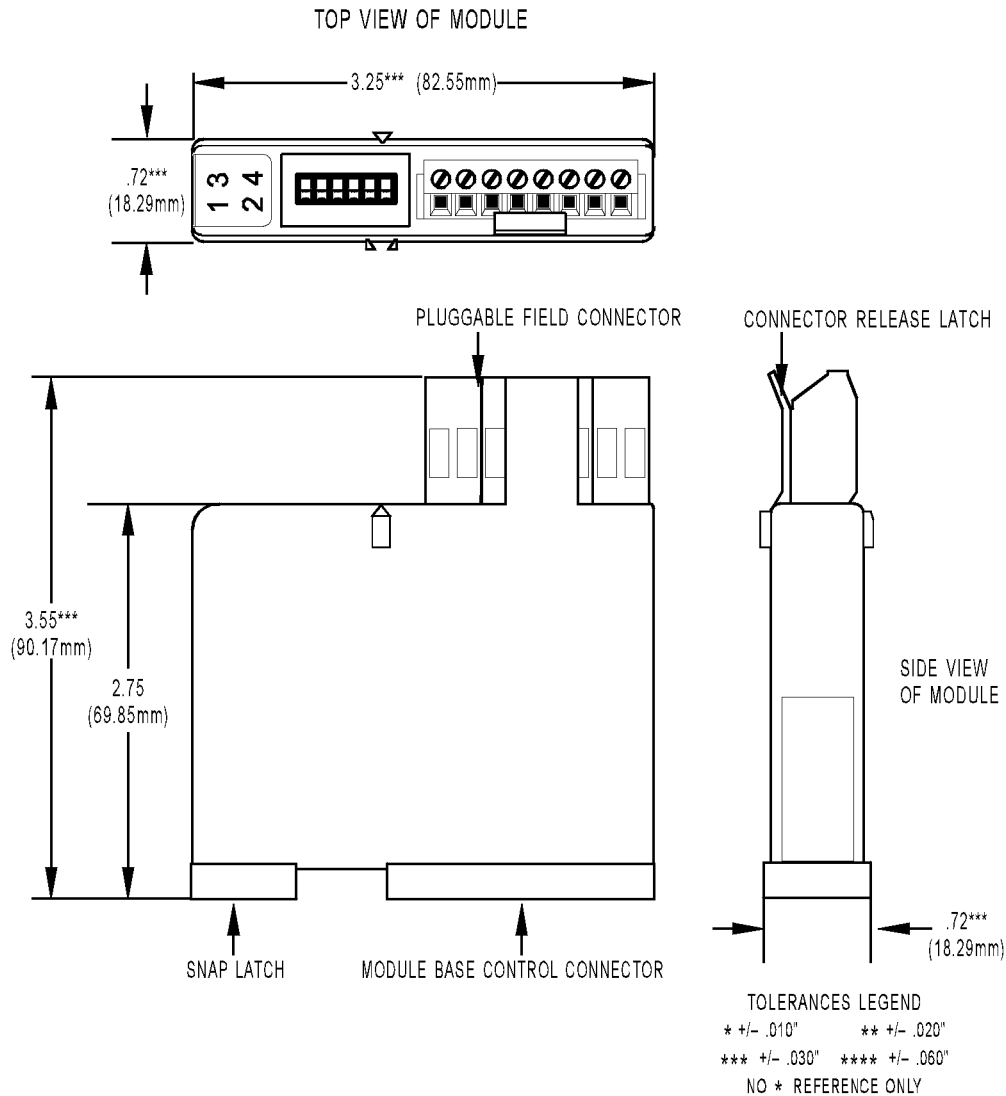
LED	Indicates
1	Not used
2	Not used
3	RX port A
4	RX port B

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

SNAP-SCM-W2 Module

Dimensions

SNAP-SCM-W2 Wiegand Serial Communication Module



More About Opto 22

Products

Opto 22 develops and manufactures reliable, flexible, easy-to-use hardware and software products for industrial automation, energy management, remote monitoring, and data acquisition applications.

OptoEMU Energy Management System

The easy-to-use OptoEMU Sensor monitors electrical energy use in your facility and delivers detailed, real-time data you can see and analyze. The Sensor can monitor energy data from pulsing meters, electrical panels or subpanels, and equipment. View energy data online using a software service or incorporate the data into your control system for complete energy management.

SNAP PAC System

Designed to simplify the typically complex process of selecting and applying an automation system, the SNAP PAC System consists of four integrated components:

- SNAP PAC controllers
- PAC Project™ Software Suite
- SNAP PAC brains
- SNAP I/O™

SNAP PAC Controllers

Programmable automation controllers (PACs) are multifunctional, modular controllers based on open standards.

Opto 22 has been manufacturing PACs for over two decades. The standalone SNAP PAC S-series and the rack-mounted SNAP PAC R-series both handle a wide range of digital, analog, and serial functions for data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

SNAP PACs are based on open Ethernet and Internet Protocol (IP) standards, so you can build or extend a system easily, without the expense and limitations of proprietary networks and protocols.

PAC Project Software Suite

Opto 22's PAC Project Software Suite provides full-featured, cost-effective control programming, HMI (human machine interface) development and runtime, OPC server, and database connectivity software for your SNAP PAC System.

Control programming includes both easy-to-learn flowcharts and optional scripting. Commands are in plain English; variables and I/O point names are fully descriptive.

PAC Project Basic offers control and HMI tools and is free for download on our website, www.opto22.com. PAC Project Professional, available for separate purchase, adds

OptoOPCServer, OptoDataLink, options for controller redundancy or segmented networking, and support for legacy Opto 22 serial *mistic*™ I/O units.

SNAP PAC Brains

While SNAP PAC controllers provide central control and data distribution, SNAP PAC brains provide distributed intelligence for I/O processing and communications. Brains offer analog, digital, and serial functions, including thermocouple linearization; PID loop control; and optional high-speed digital counting (up to 20 kHz), quadrature counting, TPO, and pulse generation and measurement.

SNAP I/O

I/O provides the local connection to sensors and equipment. Opto 22 SNAP I/O offers 1 to 32 points of reliable I/O per module, depending on the type of module and your needs.

Analog, digital, and serial modules are all mixed on the same mounting rack and controlled by the same processor (SNAP PAC brain or rack-mounted controller).

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 do no statistical testing and each part is tested twice before leaving our factory, we can 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, comprehensive technical support for Opto 22 products. Our staff of support engineers represents 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.

Additional support is always available on our website: how-to videos, OptoKnowledgeBase, self-training guide, troubleshooting and user's guides, and OptoForums.

In addition, hands-on training is available for free at our Temecula, California headquarters, and you can [register online](#).

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 or 951-695-3000, or visit our website at www.opto22.com.

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