

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

Description

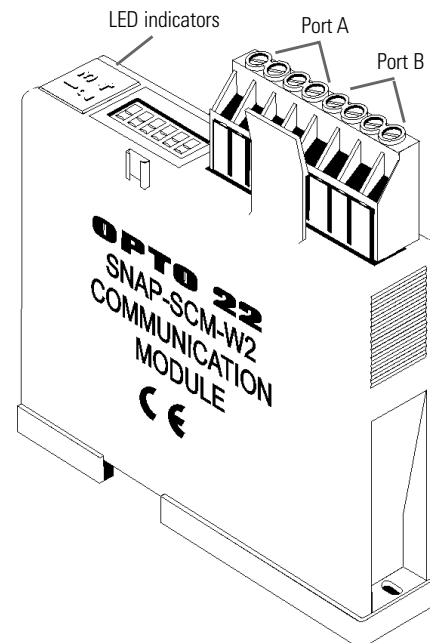
The SNAP-SCM-W2 serial communication module provides two isolated channels of data input from attached devices that comply with the Wiegand® interface format. Ideal for access control applications, the SNAP-SCM-W2 complies with the Security Industry Association Standard Protocol for the 26-bit Wiegand 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 is designed for users of SNAP Ultimate I/O™ with the SNAP-UP1-ADS brain. It can also be used with analog/digital/serial SNAP Ethernet brains and SNAP-IT units. 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, and Modbus/TCP. When the module is used with the SNAP Ultimate I/O brain, incoming data from Wiegand devices can also be processed by an ioControl™ strategy running on the brain.

The SNAP-SCM-W2 snaps into Opto 22 B-series 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.

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 modified to fit your application. Both samples can be downloaded from our Web site at www.opto22.com.

For details on using the SNAP-SCM-W2, see Opto 22 form #1191, the *SNAP Serial Communication Module User's Guide*. For information on the sample ioControl strategy and utility application, see form #1366, the *Door Access Management* technical note.



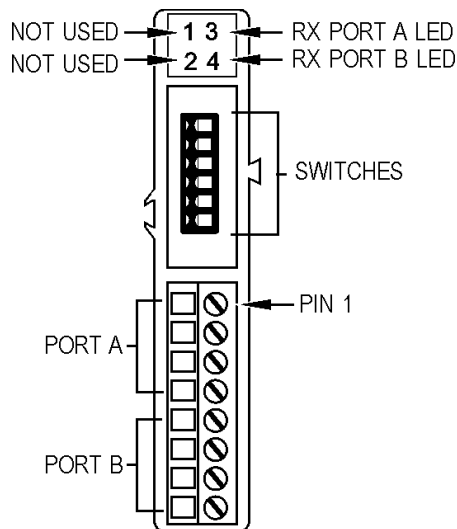
Features

- 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.

Specifications

Brain compatibility	SNAP-UP1-ADS, SNAP-UP1-M64, SNAP-B3000-ENET, SNAP-ENET-RTC, SNAP-WLAN-FH-ADS
Channel-to-channel isolation	250 V _{RMS}
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
Operating Temperature Storage Temperature	0° to 70° C operating -30° to 85° C storage

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

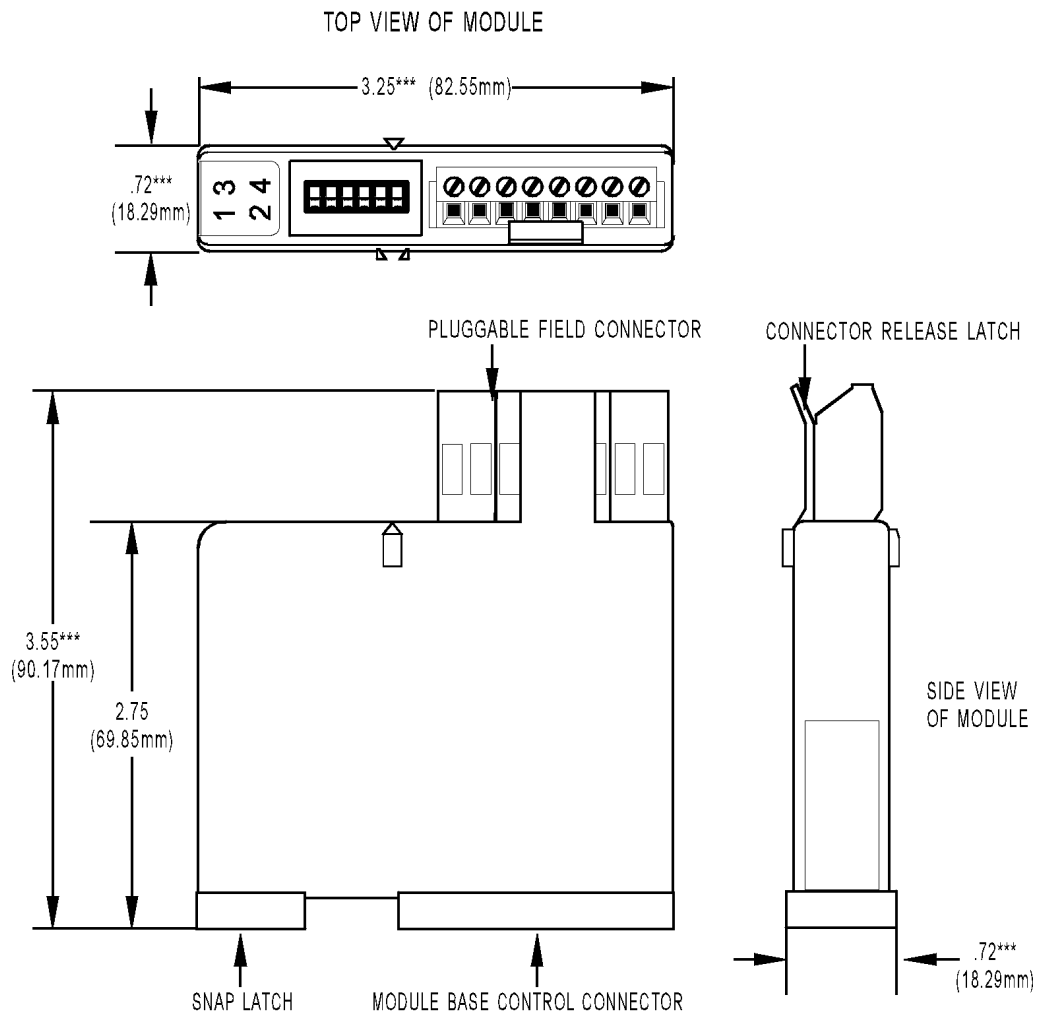


LED	Indicates
1	Not used
2	Not used
3	RX port A
4	RX port B

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



TOLERANCES LEGEND
* +/- .010" ** +/- .020"
*** +/- .030" **** +/- .060"
NO * REFERENCE ONLY

Products

Opto 22 produces a broad array of reliable, flexible hardware and software products for industrial automation, remote monitoring, enterprise data acquisition, and machine-to-machine (M2M) applications.

SNAP Ethernet Systems

Based on the Internet Protocol (IP), SNAP Ethernet systems offer flexibility in their network connectivity and in the software applications they work with. The physical network may be a wired Ethernet network, a cellular wireless network, or a modem. A wide variety of software applications can exchange data with SNAP Ethernet systems, including:

- Opto 22's own ioProject™ suite of control and HMI software
- Manufacturing resource planning (MRP), enterprise management, and other enterprise systems
- Human-machine interfaces (HMIs)
- Databases
- Email systems
- OPC client software
- Custom applications
- Modbus/TCP software and hardware.



SNAP Ethernet system hardware consists of controllers and I/O units. Controllers provide central control and data distribution. I/O units provide local connection to sensors and equipment.

SNAP OEM Systems

Opto 22 SNAP OEM I/O systems are highly configurable, programmable processors intended for OEMs, IT professionals, and others who need to use custom software with Opto 22 SNAP I/O modules.

Linux® applications running on these systems can read and write to analog, simple digital, and serial I/O points on SNAP I/O modules using easily implemented file-based operations. Applications can be developed using several common development tools and environments, including C or C++, Java, and shell scripts.



M2M Systems

Machine-to-machine (M2M) systems connect your business computer systems to the machines, devices, and environments you want to monitor, control, or collect data from. M2M systems often use wireless cellular communications to link remote facilities to central systems over the Internet, or to provide monitoring and control capability via a cellular phone.

Opto 22's Nvio™ systems include everything you need for M2M—interface and communications hardware, data service plan, and Web portal—in one easy-to-use package. Visit nvio.opto22.com for more information.

Opto 22 Software

Opto 22's ioProject and FactoryFloor® software suites provide full-featured and cost-effective control, HMI, and OPC software to power your Opto 22 hardware. These software applications help you develop control automation solutions, build easy-to-use operator interfaces, and expand your manufacturing systems' connectivity.



Quality

In delivering hardware and software solutions for worldwide device management and control, Opto 22 retains the highest commitment to quality. We do no statistical testing; each product is made in the U.S.A. and is tested twice before leaving our 160,000 square-foot manufacturing facility in Temecula, California. That's why we can guarantee solid-state relays and optically-isolated I/O modules *for life*.

Product Support

Opto 22's Product Support Group offers comprehensive technical support for Opto 22 products. The staff of support engineers represents years of training and experience, and can assist with a variety of project implementation questions. Product support is available in English and Spanish from Monday through Friday, 7 a.m. to 5 p.m. PST.

Opto 22 Web Sites

- www.opto22.com
- nvio.opto22.com
- www.internetio.com (live Internet I/O demo)

Other Resources

- OptoInfo CDs
- Custom integration and development
- Hands-on customer training classes.



About Opto 22

Opto 22 manufactures and develops hardware and software products for industrial automation, remote monitoring, enterprise data acquisition, and machine-to-machine (M2M) applications. Using standard, commercially available Internet, networking, and computer technologies, Opto 22's input/output and control systems allow customers to monitor, control, and acquire data from all of the mechanical, electrical, and electronic assets that are key to their business operations. Opto 22's products and services support automation end users, OEMs, and information technology and operations personnel.

Founded in 1974 and with over 85 million Opto 22-connected devices deployed worldwide, the company has an established reputation for quality and reliability.