



## SM-56 V.92 Security Modem



There are several high security modes, making this security modem very versatile:

- The modem may be configured as a high-quality, simple V.92 modem.
- It may be configured to use one-time pass phrases, the list generated upon request by an administrative user.
- An AES encrypted connection mode requires a shared key and session key on the modems at both ends of the connection. The connection is secured using the AES encryption algorithm and the modem will only connect with other properly configured SM modems containing proper keys.
- A dial-back option is allows the modem to dial back to a phone number when it is called. That number must be configured in a valid number list,
- It will disconnect after three invalid login connection attempts or in encryption mode, after a single failure.

### FEATURES

- Use for NERC CIP security perimeter dial-in
- Industrial temperature rated -40 to +75 C
- Asynchronous RS232 port
- Telnet functionality
- Comprehensive activity logging
- One-time pass phrase option
- User name and password authentication
- Secure AES encrypted connection option
- Dial back option
- Administrative user configuration
- Easy to setup and maintain
- Extensive statistics logging and diagnostic tools
- Compact size, Stand-alone or Rack Mounting
- Many AC and DC power supply options

### DESCRIPTION

The SM-56 is an industrial rated high security dial-in/out modem containing one RS-232 serial port, one telephone line V.92 modem port, and one 100BaseT ethernet port. It may be used as any other simple modem or configured for high security uses. The RS-232 serial port operates at asynchronous speeds from 1200 bps to 115.2 Kbps.

If the modem detects a denial of service attack, an SOS feature will stop answering dial-in calls temporarily and report to a dial-in pre-configured number such as a numeric pager.

Call attempts, call statistics, and management functions are always logged.

The 10/100 ethernet port shares the dial-out modem for locally connected LAN clients without directly connected modems. This features is accessed with the simple telnet program provided on all PC workstations. It also works in reverse as a telnet client after authentication.

The modem is configured using proprietary AT commands with a telnet connection to the 100BaseT port or directly connected to the RS-232 serial port. A validated administrator must be signed into the modem to perform any management steps remotely.

The SM-56 security modem is ideally suited for Critical Infrastructure Protection regulations propagated by the NERC and some FIPS standards. It may be used to meet NERC Cyber Security Standards CIP-005-2 and CIP-005-1 to secure the electronic security perimeter (CPS) around all critical cyber assets.

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## SPECIFICATIONS

### General

One asynchronous RS232 serial port:

- DE-9P (PC-9pin) connector
- Speeds to 115.2 Kbps

One V.92 2-wire modem port

Multiple high security modes:

One time pass phrases

Shared key connection

Dial-back

SOS feature

Logging

AT command configurations

Ethernet port :

- 10/100BaseT half duplex used for dial-in telnet, configuration, or dial-out modem sharing.

Protocol Features

- AES encryption

### Connection Modes

- Simple dial up answer or originate modem
- Name and password user challenge
- Name, password and one-time pass phrase challenge
- Telnet into modem for modem pooling
- Telnet out of answering modem to a device
- Serial port connection to modem
- SM-56 to SM-56 with AES encryption
- Administrator mode to manage names and passwords
- Administrator mode to create pass phrases
- Administrator mode to retrieve modem log

**Indicators** (front panel)

Front - Power, Status, port activity, modem TD, RD, CD, DTR

Rear – LAN connection, LAN activity

### Controls

DIP switch:

Switch 1 – hard reset

Switches 2, 3 and 4 – Speeds 1200 bps to 115.2 Kbps

### Physical/Electrical

Standalone or rack mount, DIN clip option

Power requirements: 6VDC, 3 watts

12, 24, 48, 125 VDC and 240 VAC options are available

Supplied with 100-240 VAC external power supply

4 ¼" x 5 ½" x 1 ¾"

One pound

### Environmental

- Operational Temperature: -40 to +75 C
- Storage Temperature: -50 to +75 C
- Humidity: <95% Non-condensing



Rear View with DC power supply connector



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