

SCM-4825

Sentinel V2 Control Panel (Head-end)



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Description: The SCM-4825 Sentinel V2 Control Panel, part of the *Sentinel V2 Emergency Communication System*, is designed to provide fully supervised, full duplex voice communication, between each connected Call Station and Base Station phone. The SCM-4825 allows for the automated-timed dial-out capability to an alternate monitoring location. The SCM-4825 Control Panel can host 8 devices. It has a 3U form factor and can mount in an existing network rack or on a wall (using included brackets). Requires primary 120VAC input power. Battery backup options are available (sold separately) to ensure the system remains operational if primary AC power is lost.

Operation: (1) SCM-4825 head-end unit is required per system. It facilitates the system operations and is where most system connections will be made. The SCM-4825 can host up to (8) devices (combination of Call Stations or Base Station Phones). Multiple relay outputs allow for supervision of the system statuses.

To expand / extend the system network, the ES-4808S Expansion Module Kit must be used. Each ES-4808S hosts up to (8) additional devices. They can be added as needed to expand the system network to support up to a maximum of 500 devices.

Call Off-Site Operation: The Sentinel V2 Emergency Communication System incorporates a programmable automatic dial feature to allow the system to connect to a 24/7 attended monitoring location. In the event that a call from a Call Station is not answered at any of the Base Station(s), after a preset amount of time, the system can automatically dial a programmed phone number. This allows the Call Station to be connected directly to the 24/7 monitoring location live with two-way voice communication. The system is compatible with either digital or analog phone lines, which must be provided by the end-user. Digital phone lines require a dedicated network connection as well as the telephone account username/password to utilize. Analog phone lines require the additional POTS-4800S modem and an analog phone line (not provided).

Mounting: Cornell recommends mounting the Sentinel V2 Main System (SCM-4825) inside a UL listed server rack. The SCM-4825 unit can also be wall mounted utilizing the same brackets for rack mounting (adjust brackets as needed). Refer to the manual for more details on mounting.

Engineering Specifications: The contractor shall furnish and install the CORNELL SCM-4825 Sentinel V2 Control Panel as indicated on the plans. Systems shall be programmed to meet customer-provided-specifications – custom programming options are available at additional cost. Please contact Cornell for details and pricing.

SCM-4825 Technical Information:

- Primary Power Requirements: 120V, 60Hz, 15A dedicated grounded circuit required.
- Operating Environment: 32-120°F Indoor Non-condensing; Humidity <80%
- Physical Dimensions: 17"W x 14"D x 5-1/8"H
 - Mounting Brackets add .97" to either side of the enclosure.
- Mounting: Rack, wall, or backbox can be used (follow instructions provided in installation manual).
- Wiring: Cat5e (or better) Ethernet cabling is required for network connections between the Main System, Base Station(s), Expansion Module(s) and Call Stations.
 - 14-18 AWG conductor recommended for 24VDC power connections.
- Supervision
 - AC fail supervision (form "C" contacts).
 - Low battery / battery fail supervision (form "C" contacts).
 - (2) Programmable relay outputs ("Relay 1" & "Relay 2" form "C" contacts)
 - Each can be programmed to trigger during 1 or more of the following faults:
 - Call Station, Master/Remote Phone(s), Trunk Phone Line, Network
- Temperature (the SCM-4825 includes a built-in fan for cooling):
 - Operating Environment: 32-120°F Indoor / Relative Humidity 80%, Non-Condensing
 - BTU/Hr (approx.): 24VDC / 74 BTU/Hr.
 - System AC input VA requirement: 402.5VA
- Battery Backup ((Optional, recommended - additional equipment needed)
 - Built-in charger for sealed lead acid or gel type batteries (0.7A charge rate).
 - Automatic instantaneous switch over to backup battery power when AC fails.
- Battery Backup Options: (2) Battery backup options with the below part numbers:
 - **B-4825-7**: offers approximately 3 hours of backup for the SCM-4825 only.
 - x(2) 12VDC, 7Ah batteries w/ backbox to mount adjacent to SCM-4825
 - **B-4865**: offers approximately 28+ hours of backup for the SCM-4825 or other B-5243A power supplies included with Expansion Switches.
 - x(2) 12VDC, 55+Ah batteries

Note: Cornell recommends using the same battery backup option throughout the entire system!

