Sur-Gard System IV

Virtual Receiver

Features That Make a Difference:

- Supports over 120 communication formats in small footprint

- Monitor up to 73,728 DSC IP Transmitters (GSM or Ethernet) (fully redundant System IV with 24 IP linecards and upgrade License Keys required)

- Auto-switching redundancy for power and to output peripherals

- Fully 'hot swappable' modules

- Supports up to 24 line cards – IP or PSTN

- Can mix and match line cards

- 'Flash' download for software updates for lines cards and CPM

- Robust built-in diagnostic software

- User-friendly configuration tools

- Split Shelf reporting to automation and printer to increase the throughput

- Supports an AHS (Automatic Handshake Table) of 250,000 entries. Expandable to 500,000 with a separate license key

Compact + Powerful without Compromise

The new Sur-Gard System IV builds upon its legacy – and continues to deliver the technical features that are demanded and expected in a monitoring station receiver.

With the Sur-Gard System IV virtual receiver, the small and compact footprint – 4 U per SG-MLRF4 – packs a powerful punch: over 120 commonly-used communication formats are supported.

Depend on the Sur-Gard System IV – day in and day out

Two linked, identically configured Sur-Gard System IV virtual receivers deliver auto-switching redundancy to provide backup. For example, if the primary CPM stops working, the secondary unit automatically takes over all duties until the problem is resolved. The System IV has a built in redundant power supply. In the event of a failure of the primary power supply the backup will automatically take over without any user intervention.

The line cards are 'hot swappable': they can be quickly removed and/or replaced while the system is live.

The robust CPM with built-in diagnostic

software proactively identifies any issues through the easy-to-use Windows™-based SG-Systems Console software. Continually monitoring the automation software ensures automatic backup to a redundant port. For example, if the automation system goes off-line, the CPM automatically switches from the primary Ethernet port to a secondary one, or to one of two serial ports, before going into manual mode. The CPM polls each line card to get consistent up-to-date information.

Programming changes can be easily made using the menu-driven 1/4 VGA display or remotely over a network Ethernet connection using Sur-Gard Systems Console Software. Flash technology ensures that any required software upgrades can be conveniently made without additional hardware or firmware changes. No system downtime required.

Configure the Sur-Gard System IV the way you need it

The two 19" rugged, rack-mountable virtual receivers each house up to 12 line cards for up to 24 line cards in total. The 'mix and match' feature – IP and PSTN line cards – deliver 'plug and play' flexibility. Each line card delivers the configuration potential needed: up to 64 different profiles, each

with up to eight different handshakes, on each line card. Digital Signal Processing (DSP) increases the speed, accuracy and flexibility of each line card to allow the processing of a greater number of communication formats.

The PSTN line cards – SG-DRL4-2L – use a number of patented technologies to help decrease online time, including ANI and DNIS reception, Automatic Handshake Selection (AHS) technology and advanced two-way audio integration.

The IP line cards – SG-DRL4-IP – support up to 512 supervised and up to 3072 total DSC IP Communicators (Ethernet or GSM). Using a license key, each line card capacity can be doubled to handle 1024 supervised and up to 6144 total DSC IP Communicators.

Output ports connect to the peripherals you need, such as printers and/or computers – and to the automation software. With built-in redundancy for power and auto-switching between the linked systems, performance is assured.

Ordering Information

Main Hardware

Part No.	Description
SG-SIVBASE	Contains SG-MLRF4, SG-CPM4, SG-PSC3, SG-DC/DC3, and SG-PSU3
SG-SIVEXP	Contains SG-MLRF4, SG-SIIIINT, and SG-DC/DC3
SG-SIVREDUN	Contains SG-CPM4, SG-PSC3, SG-DC/DC3 X 2, SG-PSU3
SG-DRL4-IP	High Density IP Line Card for SG-System IV
SG-DRL4-2L	Dual Phone Line Card for standard PSTN Alarm traffic
SG-SYS4-HUB	High Speed Ethernet Backplane for SG-System IV
SG-BP3X	Centronics to RJ11Adaptor

Upgrade License Keys

SG-CPM4-250KAHS	License key to expand AHS table by 250,000 entries
SG-DRL43072IP	License key to expand amount of IP communicators by 3072

Spare Parts

Part	Description
SG-PSC3	Power Supply Controller
SG-DC/DC3	DC Voltage converter
SG-PSU3	Power Supply Unit
SG-MLRF4	System IV Metal Rack
SG-SIII-INT	Interconnect Kit
SG-CPM4	Central Processing Module for SG-System IV

Specifications

DIMENSIONS	
SG-MLRF4	19" x 3.5" x 12.24" (38 cm x 9 cm x 31.1 cm) 4 U NOTE: Uses standard 19" rack
SG-SYS4-HUB	17.8" x 1.7" x 8.1" (44 cm x 4.3 cm x 20.5 cm) 1 U NOTE: Uses standard 19" rack
WEIGHT	
SG-MLRF4	8.2 lbs (3.7 kg)
SG-SYS4-HUB	7.0 lbs (3.2 kg)
INPUT VOLTAGE	
SG-MLRF4	110/220 VAC, 50/60 Hz, 2.5 A (Max) 25W max.
SG-SYS4-HUB	100-240VAC/50-60 Hz, 0.175 A (Max) 21W max.
Battery backup	External UPS (not supplied)
Operating Environment	32 – 122 °F (0 – 50 °C) 90%, non-condensing
Built-in connectors	- Parallel printer port - Serial RS-232 port COM 1: connects to Automation Software (used by monitoring station) - Serial RS-232 port COM 2: connects to external serial printer or PC to view/print events - Ethernet: RJ45 modular jack for 10/100Base T automation output
Compatible communication formats *(NOTE: For a complete list, contact Sur-Gard)*	Up to 120, including: 10-40 baud, 3/1, 4/2 checksum, 3/1,4/1, 4/1 ext. 4/1 or 3/2, 4/2, Express, Acron, Adcor, Ademco Express, Ademco High Speed, Ademco Super Fast, BFSK, Contact ID, FBI Super Fast, ITI, Modem Illa2, Modem II, IIA, IIB, IIE, Sescoa Super Speed, SIA 20, SIA 8, SIA I, SIA II, SIA III, SK FSK 1, SK FSK 2, Sur-Gard 4/2, 4/3
Line card capacity	Up to 24 line cards (IP or PSTN) in any combination
Line card - PSTN (SG-DRL4-2L)	- Up to 2 lines/card - Up to 64 different profiles/card with up to eight different handshakes/profile - Software upgrades via 'flash' download - 256-event memory buffer/card
Line card - IP (SG-DRL4-IP)	- Up to 64 different profiles/card with up to eight different handshakes/profile - 256-event memory buffer/card - 128-bit AES encryption - Anti-hack design - Compatibility with all DSC IP Alarm Communicators (GPRS or Ethernet) - UL AA High-Line Security and ULC Level 3/4/5 listed - FIPS/NIST listed
Visual display	Menu-driven 1/4 VGA display
Incoming line identification	ANI (to identify the calling control panel) and DNIS (to identify and store the profile (receiver type) of the incoming calls) reception or standard Bellcore Caller ID
Certification	FCC Part 15 Radiated/Conducted emissions ACTA TIA-968B (FCC Part 68) Telecom UL/ULC Central Station Fire (UL 864/ULC-S559) UL/ULC Central Station Burglary Alarm Units (UL 1610/ULC-S304) CE Compliant (ETSI ES203021-1, -2, -3), EN60950-1 Safety, EN50130-4 EMI, EN61000-6-3 Class B Radiated/Conducted Emissions) CSFM (California State Fire Marshall) 7300-1273: 125