# SG-System 5

## Virtual Receiver

## Features That Make a Difference:

- Monitor up to 1,474,560 IP communicators (Cellular or Ethernet) with up to 24 IP line cards and upgrade license keys
- Monitor PSTN accounts using our new SG-DRL5-2L dual line card, or upgrade an existing System IV receiver to a System 5 using our SG-DRL5-ADPT to use the SG-DRL4-2L line cards in the System 5
- Patented AHS feature with up to 1 million accounts (expandable via license) and new lockable handshake and format options for increased control
- Supports visual verification features for DSC PowerSeries Neo
- Industry-leading account density per U rack for a maximum capacity of 24 IP line cards or 48 PSTN lines in a 4U footprint
- SG-DRL5-IP line card with capacity of up to 4,096 IP accounts (512 visual verification/512 supervised/3072 unsupervised), upgradable up to 61,440 via license keys
- SG-DRL5-2L adds Dual PSTN capability with 150+ communication formats available
- SG-CPM5 V1.1 adds 3 new automation modes: Split reporting, Multi-port and Logging
- Integrated redundancy including hot-swappable modules and auto-switching for power and peripherals eliminates downtime
- CMS access to visual verification files through SG-Systems Console
- Remote upgradable via SG-Systems Console
- Enhanced real time system status and hardware diagnostics via SG-Systems Console and touch screen interface

## Ensures investment for future requirements

The new SG-System 5 builds upon the Sur-Gard legacy, of developing industry-leading monitoring station receivers. Sur-Gard delivers utmost reliability through features such as integrated redundancy, eliminating the costs incurred by downtime of the system. The new SG-System 5 also ensures that the investment in the system caters to growing system requirements. Up to 1,474,560 IP Cellular or Ethernet communicators can be monitored through upgrade license keys as well as upgradeable memory. With the new PSTN line card and AHS table expansion up to 1 million accounts, the SG-System 5 can scale to meet your business needs.

## Support innovative alarm verification solutions

SG-System 5 supports industry trending alarm verification solutions such as visual verification, significantly reducing incremental costs that can be incurred by false alarms, while adding to the security professional's RMR.

PIR cameras are strategically installed as part of a security system and are activated the moment an alarm is triggered. Via the SG-System 5 Receiver, images are sent instantly through to the monitoring facility where the situation can rapidly and accurately be assessed and escalated to authorities, if required, while providing critical information. The SG-Systems Console software allows Central Monitoring Stations access to visual verification images. Alternatively, in conjunction with compatible software automation companies, the integrated receiver allows for seamless visual verification viewing and increased output that enhances the speed of processing alarm communications.

## Smaller Yet Packed With Power

SG-System 5's more compact footprint makes for easier space management.

With a reduced overall size of 4U, the receiver offers highest account density per U rack available in the industry.

The built-in redundancy for power and auto-switching assures continuous performance of all peripheral devices connected to the output ports.

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

The robust CPM has built-in diagnostics that proactively identify any issues and report them to 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. New licenses unlock patented additional SG-CPM5 TCP Automation output ports for added redundancy and load sharing to ensure maximum reliability. New Split Reporting automation mode balances automation port traffic between both SG-CPM5 modules for redundancy or reporting to different automation software servers. The new automation logging port (unlocked via license) can also add flexibility to the system by mirroring automation port traffic from all SG-TCP ports to the logging port.

Programming changes are easily made using the menu-driven touch screen or remotely over the network Ethernet connection using SG-Systems Console Software. Firmware upgrades can be conveniently done as they become available via SG-Systems Console Software without additional hardware, eliminating associated downtime. The SG-Systems Console Software also offers hardware diagnostics, monitoring the fan, power, network supervision as well as the overall health of the receiver. An intuitive touch screen interface makes navigating through manual programming easy. Real time system status is also available through this user-friendly touch screen.

The IP line cards – SG-DRL5-IP – support up to 512 supervised accounts and up to 512 visual verification accounts, and up to 3072 unsupervised accounts. Using license keys, two additional standard tables may be added for up to 12,228 per card. Further IP account expansion to adapt to business growth can easily be handled through SG-System 5 extended-capacity license key with up to 15,360 unsupervised accounts, up to 2,560 supervised accounts and up to 2,560 visual verification accounts per table, resulting in up to 61,440 per line card and 1,474,560 for 24 lines.

The SG-DRL5-2L PSTN Line Card adds compatibility for monitoring a wide range of phone line-connected systems with support for more than 150 communication formats. Expandable SG-CPM5 memory and AHS licenses mean the receiver capacity can be scaled as more line cards are added.

The SG-DRL5-ADPT allows re-use of existing SG-DRL4-2L line cards to assist with the transition to the SG-System 5.

## Ordering Information

### Main Hardware

| Part No. | Description |
| --- | --- |
| SG-S5BASE-600 | SG-MLRF5, SG-CPM5, SG-PSU5-600 |
| SG-S5REDUN-600 | SG-CPM5, SG-PSU5-600, SG-UIB5 |
| SG-DRL5-IPSTD | SG-DRL5-IP receiver line card with paddle board |
| SG-DRL5-2L | Dual PSTN line card with paddle board |
| SG-DRL5-ADPT | Adapter allowing use of SG-DRL4-2L cards in System 5 |
| SG-S5LFANTR | SG-DRL5-IP line card fan tray (Required: one per every 6 IP line cards) |
| SG-S5LBRKT | SG-DRL5-2L extractor bracket (set of 2) (Required: one per every 6 PSTN line cards) |
| SG-SYS5MEM4 | 4GB EMMC Expansion for SG-CPM5 (includes license for first 250,000 AHS entries) |

### Upgrade License Keys

| Part No. | Description |
| --- | --- |
| SG-DRL5-IPSLIC2 | additional 512/512/3,072 visual verification/ supervised/unsupervised IP accounts - for a total of 8,192 accounts |
| SG-DRL5-IPSLIC3 | additional 512/512/3,072 visual verification/ supervised/unsupervised IP accounts -for a total of 12,288 accounts |
| SG-DRL5-IPXLIC | extended capacity of up to 2,560/2,560/15,360 visual verification/supervised/unsupervised IP accounts per table - for a total of 61,440 accounts |
| SG-CPM5-250KAHS | License to add 250,000 AHS Entries |
| SG-CPM5-AUTO | License to unlock TCP Automation Port 2, 3, or 4 |
| SG-CPM5-LOG | License to unlock SG-TCP Automation Logging Port |

### Spare Parts

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| --- | --- |
| SG-MLRF5 | Sub-rack metal work |
| SG-PSU5-600 | 600W PSU Power Supply |
| SG-CPM5 | CPM module |
| SG-DRL5-IPPAD | IP Paddle card |
| SG-UIB5 | User interface touch screen module |

## Technical Specifications

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| --- | --- |
| SG-MLRF5 | 19" x 3.5" x 12.24" (38 cm x 9 cm x 31.1 cm) 4 U NOTE: Uses standard 19" rack 110/220 VAC, 50/60 Hz, 2.5 A (Max) 200W max. |
| Battery backup | External UPS (not supplied) |
| Operating Environment | 32 – 122 °F (0 – 50 °C) 90%, non-condensing |
| Built-in connectors | - Parallel printer port<br>- 2 X Serial RS-232 connection to Automation Software (used by monitoring station)<br>- Serial RS-232 connection to external serial printers<br>- Ethernet: RJ45 modular jack for 1GB or 10/100Base automation output |
| Line card capacity | Up to 24 line cards |
| Line card - IP (SG-DRL5-IP) | - 512-event memory buffer/card<br>- 128-bit AES encryption<br>- Anti-hack design<br>- Compatibility with all DSC IP Alarm Communicators (Cellular or Ethernet) and licensed partners<br>- 512 Visual verification IP accounts<br>- 512 Supervised IP accounts<br>- 3,072 Unsupervised IP accounts |

**Line card - PSTN (SG-DRL5-2L)**  - Up to 2 PSTN lines/card

- Up to 64 different profiles/card with up to 8 different handshakes per profile

- Software upgrades via SG-System 5 Console

- Compatible communication up to 150 formats, 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 IIIa2, 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
(For a complete list, refer to SG-System 5 Operating Manual)

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|---|---|
| **Visual display** | Touch screen user interface |

## Industry approvals

**USA**
- FCC Part 15 Class B
- UL1610 (Commercial Burg)
- UL864 (Commercial Fire) Technical Specifications
- CSFM (Commercial Fire)
- NIST Certification for AES 128 bit encryption

**Canada**
- ICES Class B
- ULC-S559 (Commercial Fire)
- ULC-S304 (Commercial Burg)