Intrunet™ SPC Control Panel SPC6000

V3.1

Perfect building protection inside and outside

- Cost effective integration of Intrusion and Access functionality
- Investment protection with modular system design
- Individual management of up to 512 users
- System partitioning with up to 60 areas
- Efficient audio / video alarm verification with 16 verification zones
- Reliable monitoring of up to 512 zones
- Flexible control of up to 512 free programmable outputs
- Powerful management of up to 64 doors (64 readers)
- Large event log for up to 10,000 intrusion / 10,000 access events
- Full connectivity with tri-path communications (PSTN, GSM, integral IP)
- Instant control and safe operation over on-board Web Server
- User friendly interfaces with innovative voice annunciation support
- Intuitive configuration facilities
- Cost saving automated remote servicing and site administration
- Reliable high-speed expander bus (X-BUS) with loop topology
- Customised processes with advanced functions set
- Seamless integration of Intrunet wireless detectors

Answers for infrastructure.

SIEMENS

Functionalities

- **Cost effective integration of intrusion and access functionality**

The SPC6000 combines intrusion and access functionality in the same controller for a cost effective solution of intrusion protection and people management in a commercial building. The powerful and future oriented controller architecture (ARM processor) also offers high performance in connectivity, system features and Expander bus (X-BUS).

- **Investment protection with modular system design**

The modular system design allows the use of common SPC-series modules and expanders across the whole system family. This facilitates the planning efforts for the various application sizes and allows the system to grow with the customer requirements.

- **System partitioning with up to 60 areas and up to 512 users**

The SPC panel can be partitioned into 60 independent areas to support multi-area applications. Up to 512 users can be individually configured with user rights for access and intrusion functionality.

- **Efficient audio / video alarm verification with 16 verification zones**

Up to 4 IP cameras and 16 audio devices (audio expanders or keypads with audio) can be combined to create up to 16 verification zones. The captured pre-, post- and live event audio streams and video images are transmitted over IP to the ARC/CMS to allow superb true alarm rate and short decision times on alarms.

- **Reliable monitoring and flexible control of up to 512 zones and 512 outputs**

A total of up to 512 zones and 128 outputs can be programmed as needed by ticking specific attributes for the chosen function. This allows individual detection, control and event notification at numerous points throughout a larger building. Up to 10,000 intrusion events and 10,000 access events across all areas can be stored in the controller log book.

- **Powerful management of up to 64 doors (64 readers) in 32 door groups**

The connected card readers allow an easy entry or exit with card and/or PIN through up to 64 entry doors or 32 entry / exit doors, combined with automatic setting and unsetting of areas depending on the individual user rights. The doors can be enabled with a choice of access functions such as anti-pass back, custodian or escort.

- **Instant control and safe operation over on-board Web Server**

The on-board Web server enables users or engineers to log on remotely from any PC Web browser and check the system and zones status, as well as logs and perform certain programming operations, such as area setting or unsetting.

- **User friendly interfaces with innovative voice annunciation support**

The SPC keypads provide an easy interface to locally control SPC systems. The 32-character standard keypads with clear text display provide a modern and functionally advanced user interface for all type of standard applications.
The comfort keypad with its large LCD display and optional voice assistance functionality is ideal to easy operate all kind of applications, from simple single area systems up to complex multi area systems.
The indication expander offers a flexible programmable user interface to indicate any status information on LEDs (e.g. open zones, area setting states) and to activate processes (e.g. setting of area, open garage door). It's integrated card/tag reader can be used to unlock indicators or keys.
The key switch expander enables the activation of user specific functions (e.g. setting area, temporary zone bypass, activate output) and indicates status information on LEDs (e.g. area setting state, key switch position, open zone).

Functionalities

- **Full connectivity with tri-path communications (PSTN, GSM/GPRS, integral IP for SPC63xx)**

Central station connectivity is a major part of the security system. The SPC panels support PSTN and GSM communication with all the major communication formats to standard alarm receivers and IP communication (Ethernet with GPRS backup) to SPC Com alarm receiving software, prioritising of communication channels based on a predefined strategy.
SPC supports also full connectivity for the engineer / user with secure authentication and rights management, via IP broadband / local area network (Ethernet), GSM or PSTN networks.
SMS text messaging via GSM module enhances the ability to notify events or alarms to the user. Moreover the user can control the panel via SMS commands via GSM.

- **Intuitive Configuration Facilities**

The SPC panels provide easy and flexible configuration facilities. Remote configuration through any of the communication channels by use of the on-board Web Server or a PC with SPC Pro Programming Software minimizes expensive on-site engineering costs.
If off-site programming is not appropriate, the PC web browser or SPC Pro can be used with direct connection to the panel. Engineer friendly menus with intuitive interface along with system templates make the SPC panel one of the quickest panels to program. In addition, the SPC Fast Programmer can simply be plugged on the SPC controller for setup using pre-programmed configurations.

- **Cost saving automated remote servicing and site administration**

The optional SPCS320 Remote Maintenance Server ensures a high service quality at reduced costs. Without intervention of an engineer the SPC panel periodically sends automated technical system checks to a server. The data can be auto-analysed and printed; an ideal support for existing or new service agreements with customers.
And the optional SPCS410 SPC Safe Server reduces costs to administer a large installed panel base. The central SPC Safe server always contains up-to-date configuration files and provides direct access for engineers and panels to the common database.
Configuration files can be easily imported or exported to the engineers PC, and with the SPC63xx any configuration changes (e.g. changed PIN) are automatically transmitted over IP (Ethernet) to the server.

- **Reliable high-speed Expander Bus (X-BUS) with loop topology**

The high-speed Expander Bus (X-BUS with 307 kB/s) is a fast and reliable backbone for all system installations with up to 400 m distance between each bus device. The loop topology protects the system against possible communication faults caused by an interrupt or short circuit by isolating the faulty branch in the loop.

- **Seamless integration of Intrunet wireless detectors and remote controls**

Up to 120 Intrunet wireless detectors and 1 Intrunet remote control per user can be addressed using the SiWay receivers as RF access points throughout the system. The wireless zones can be mixed and match with wired zones for cost effective installation with minimal wiring.

- **Customized processes with advanced functions set**

With the advanced functions set, the SPC can be adapted to customer specific processes. The 64 individual calendar based time channels with multiple on/off switching patterns allow individual time control of users, areas, inputs or outputs. The Cause & Effects programming allows activation of outputs based on freely definable trigger conditions (combination of status change of zones, system or area outputs, user PIN, Keypad Quick Keys, calendars).
The integrated financial capability enables you to easily configure and operate standard banking functionality such as ATMs, vault rooms, separation of people at entry, or automatic seismic detector testing.

The Intrunet SPC panel range is designed to cope with the various project specific needs regarding intrusion and access functionality, connectivity, application size or security grade. Thanks to the modular and future oriented concept the system can grow with increasing customer needs supporting a long product life cycle.

■ **SPC6330.320 control panel, 8-512 zones, Ethernet, G3 metal housing**

The SPC6330.320 control panel combines in an optimal way intrusion and access functionality in one system and can be expanded according to specific customers and project needs with up to 512 zones (8 on-board), 512 outputs (6 on-board), 32 system keypads, 64 doors, 16 verification zones.

The controller provides 2 X-BUS ports (2 stubs or 1 loop), 60 areas, 512 users with different access levels, memory for 10’000 intrusion and 10'000 access events, integrated Web Server, 2 terminals for the pluggable PSTN and GSM communication options, on-board Ethernet interface.

The system is expandable with wireless receivers and supports up to 120 Intrunet wireless detectors (mixed with wired zones) and 1 remote control per user. The panel comes in a tamper protected and hinged metal housing with space for optional 17 Ah battery and 4 additional expanders.

X-BUS

The standard keypad is an iconic 32-character text keypad that is also modern, aesthetically pleasing and functionally advanced. Support of proximity cards in the various user interfaces rounds off perfectly the safe and easy operating concept.

■ **SPCK420.100 LCD-Keypad, 2x16 Characters**

The SPCK420.100 LCD keypad provides the user with an iconic interface to control the security system. It's 32 character, blue, backlight display and keyboard allows user control under all lighting conditions.
Navigation of the intuitive menu system is achieved using the central navigation key. The keypad features soft keys and alphanumeric keys that allow contextual key operation and data input directly from the keypad.

■ **SPCK421.100 LCD-Keypad, 2x16 Characters, with Card Reader**

The SPCK421.100 LCD keypad with integrated card reader provides the user with an iconic interface to control the security system. It's 32 character, blue, backlight display and keyboard allows user control under all lighting conditions.
Navigation of the intuitive menu system is achieved using the central navigation key. The keypad features soft keys and alphanumeric keys that allow contextual key operation and data input directly from the keypad.
The card reader enables quick setting / unsetting of areas uisng a proximity card only or in combination with a valid user PIN.

■ **Compatible cards and tags**

These EM4102 compatible cards are compatible to the devices with integrated card reader (SPCK421, SPCK623, SPCE120).

IB42-EM EM laminated card without print
IB44-EM Key Tag

X-BUS

The innovative comfort keypad with its large display is ideal to easily manage multiple and single areas, and in addition, the integrated voice annunciation helps to avoid errors in the day to day operation of the system.

SPCK620.100 Comfort Keypad

The SPCK620.100 comfort keypad is ideal for operating single area and multi-area applications in a user friendly way.
The 4 soft keys and multi-dimensional navigation key allow ease of use with a minimum of operational steps.
Status information and 'next step' prompts are clearly displayed on the large LCD. Customer logo, emergency or quick set functions can be displayed in idle state.
The functionality can be enhanced with the SPCE110 key switch expander or SPCE120 indication expander.

SPCK623.100 Comfort Keypad with Audio and Card Reader

The SPCK623.100 comfort keypad is ideal for operating single area and multi-area applications in a user friendly way.
The 4 soft keys and multi dimensional navigation key allow a allow ease of use with a minimum of operational steps.
Status information and and 'next step' prompts are clearly displayed on the large LCD.
Customer logo, emergency or quick set functions can be displayed in idle state.
The integrated card reader enables quick setting / unsetting of areas using a proximity card only or in combination with a valid user PIN.
The built-in speaker and sensitive microphone support audio features such as alarm verification and voice annunciation. The functionality can be enhanced with the SPCE110 key switch expander or SPCE120 indication expander.

The indication or key switch expander offer application specific status information in one glance and direct activation of functions in one operation step.

SPCE110.100 Key Switch Expander

The SPCE110.100 is a universal key switch expander with 2 tri-color LEDs, a 3-position key switch and buzzer.
The freely programmable user interface indicates the configured status information with LEDs (e.g. key switch position, area setting states) and enables activation of application specific processes by changing the key switch position (e.g. unlock keypad or indication expander, setting of an area, open or close a gate).
The expander also provides one freely programmable volt free relay output with either NO or NC terminal.

SPCE120.100 Indication Expander with Card Reader

The SPCE120.100 is a universal display expander with 16 tri-color LEDs, 4 keys, integrated card reader and buzzer.
In linked mode, with a keypad, the LEDs indicate the status of 4 areas at one glance and the areas can be directly set or unset with the assigned function keys.
In flexible mode, the freely programmable user interface indicates the configured status information with LEDs (e.g. open zones, area setting states) and enables activation of application specific processes by pressing the assigned function keys (e.g. setting of an area, open or close a gate).
With the integrated card reader the indication or operation can be enabled for authorised users only by presenting a valid proximity card.
The expander also provides one freely programmable zone which can be configured for different zone monitoring requirements.

X-BUS

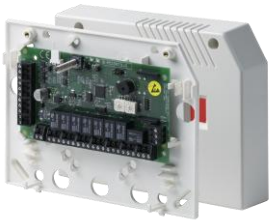
All the SPC panels can be expanded up to their maximum number of zones or outputs using the common system expanders on the X-BUS (expansion bus). The X-BUS bus supports a maximum distance of 400 meters between each Expander. A complete range of Expanders covers all the security requirements.

SPCE650.100 Expander, 8 Inputs / 2 Outputs

The SPCE650.100 expander extends the SPC system via X-BUS with 8 wired zones and 2 fully programmable relay outputs.
The zones and outputs on the expander function exactly as the zones and outputs on the SPC panel. Each zone can be configured for different zone monitoring requirements.
The outputs are volt free relays that provide both NO and NC terminals allowing the greatest flexibility.
The expander comes in a plastic housing with front tamper protection and also features an X-BUS status LED and on-board buzzer for easy device identification and extensive self-diagnostic capabilities.

SPCE652.100 Expander, 8 Inputs / 2 Outputs, with Back Tamper

The SPCE652.100 Expander incorporates the same features as the SPCE650.100 but with the additional benefit of back tamper protection.



SPCE450.100 Expander, 8 Relay-Outputs

The SPCE450.100 expander extends the SPC system via X-BUS with 8 fully programmable relay outputs. The outputs are volt free relays that provide both NO and NC terminals allowing the greatest flexibility.
The expander comes in a plastic housing with front tamper protection and features also an X-BUS status LED and on-board buzzer for easy device identification and extensive self-diagnostic capabilities..

SPCE452.100 Expander, 8 Relay Outputs, with Back Tamper

The SPCE452.100 Expander incorporates the same features as the SPCE450.100 but with the additional benefit of back tamper protection.

Each Expander provides built-in dual-isolators, a signal equalizer and a signal amplifier for highest X-BUS signal reliability. In loop topology the X-BUS is split-up into two independent spurs in case of a short circuit or interrupt, and no X-BUS components are lost.

SPCP332.300 Smart PSU (7 Ah) with 8 Input / 2 Output Expander
The SPCP332.300 smart power supply expander (PSU) extends the SPC system via X-BUS with a monitored 12 VDC local power source for battery management and connected security devices (e.g. expanders), 8 wired zones and 2 fully programmable relay outputs.
The PSU comes in a tamper protected metal housing with space for an optional 7 Ah battery.

SPCP432.300 Smart PSU (7 Ah) with 2-Door Expander
The SPCP432.300 smart power supply expander (PSU) extends the SPC system via X-BUS with a monitored 12 VDC local power source for battery management and connected security devices (e.g. expanders) and advanced door control functionality for 2 entry doors or 1 entry/exit door.
The PSU comes in a tamper protected metal housing with space for an optional 7 Ah battery.

SPCP333.300 Smart PSU (17 Ah) with 8 Input / 2 Output Expander
The SPCP333.300 smart power supply expander (PSU) extends the SPC system via X-BUS with a monitored 12 VDC local power source for battery management and connected security devices (e.g. expanders), 8 wired zones and 2 fully programmable relay outputs.
The PSU comes in a tamper protected hinged metal housing with space for an optional 17 Ah battery and 3 expanders..

SPCP433.300 Smart PSU (17 Ah) with 2-Door Expander
The SPCP433.300 smart power supply expander (PSU) extends the SPC system via X-BUS with a monitored 12 VDC local power source for battery management and connected security devices (e.g. expanders) and advanced door control functionality for 2 entry doors or 1 entry/exit door.
The PSU comes in a tamper protected hinged metal housing with space for an optional 17 Ah battery and 3 expanders.

X-BUS

The system supports a comprehensive Siemens reader portfolio and different card technologies for an easy access to areas through up to 64 doors throughout a building. The door controller manages the door covering both, intrusion and access requirements, with same infrastructure and configuration.

Wiegand / Clock&Data

SPCA210.100 2-Door Expander

The SPCA210.100 2-Door Expander extends the SPC controller with advanced door control functionality for 2 entry doors or 1 entry/exit door.
The device features 2 Wiegand/Clock&Data interfaces, 4 LED control outputs (1 void / 1 valid per reader), 4 zones (1 position- and 1 opening switch per door), 2 relay outputs (1 lock per door) and an on-board buzzer to signal "door open too long" events.

To allow greatest flexibility, the zones and outputs are freely programmable for other purposes if not used for door control. Up to 512 priority card holders can be stored on the expander for standalone operation in case of communication loss to the control panel.
The Expander comes in a tamper protected housing and features also an X-BUS status LED for easy device identification and extensive self-diagnostic capabilities.

AR6181-RX & MX

AR6182-RX & MX

HD500-EM & Cotag

PP500-EM

ARS6311-RX

PR500-EM & Cotag

HF500-Cotag

Compatible readers[1]

The Siemens readers below support the access functionality on the SPCA210.100 in an optimal way:

– 125 kHz

AR6181-RX	Miro/Hitag serial reader
AR6182-RX	Miro/Hitag reader with keypad
ARS6311-RX	SiPass standalone reader
HD500-EM	Heavy-duty proximity reader
PP500-EM	Heavy duty reader with keypad
PR500-EM	Mullion proximity reader

– Cotag

HD500-Cotag	Heavy-duty proximity reader
PR500-Cotag	Mullion proximity reader
HF500-Cotag	Hands-free reader

– Smart Card

AR6181-MX	Multi-technology reader without keypad
AR6182-MX	Multi-technology reader with keypad

[1] Please refer to the corresponding data sheet of card readers for detailed information of technical details (e.g. supported card technologies, supply voltage) and availability.

X-BUS

Audio trails and video images from pre-, post- and live-events can be sent over IP to CMS/ARC. This allows the CMS operator to verify and confirm an alarm in less time with a high true alarm rate.

■ **SPCV320.000 Audio Expander, 4 Inputs / 1 Ouput**
The SPCV320.000 audio expander extends the SPC system via X-BUS with an audio verification zone, 4 wired zones and 1 open collector output. The built in microphone and speaker allow pre- / post-event audio recording and live audio (listen / talk) between ARC/CMS and the SPC system. Up to 3 audio satellites (WAC11 speaker / microphone, WAS11 microphone) can be connected to the expander.

■ **SPCV321.000 Audio Expander, 4 Inputs / 1 Ouput**
The SPCV321.000 audio expander extends the SPC system via X-BUS with an audio verification zone, 4 wired zones and 1 line output to drive an external audio pre-amplifier. The built in microphone and speaker allow pre- / post-event audio recording and live audio (listen / talk) between ARC/CMS and the SPC system. Up to 3 audio satellites (WAC11 speaker / microphone, WAS11 microphone) can be connected to the expander.

■ **SPCK623.100 Comfort Keypad with Audio and Card Reader**
The SPCK623.100 comfort keypad is ideal to operate single area and multi area applications in a user friendly way. The built in speaker and sensitive microphone support audio features as alarm verification or voice annunciation.

■ **Compatible Siemens IP-Cameras**
The following Siemens IP-cameras[2] ideally support the integrated video verification features.

CCIC1410 1/4" IP-Cameras
CFMC1315 1/3" IP Fixdome 1.3MP Colour

[2] Please refer to the corresponding data sheet of IP-cameras for detailed information of technical and availability.

X-BUS

The signals of Intrunet wireless detectors and remote controls can be received via any of the connected wireless access points allowing optimal signal reception and range extension within an application. And the rollout is done very quickly via keypad, web browser or the SPC Pro programming tool.

■ **SPCW110.000 SiWay RF-Kit for Panel with Metallic Housing**
The SPCW110.000 SiWay RF-Kit for Panel extends the SPC control panel with a wireless access point for Intrunet wireless detectors and remote controls within the reception range. The wireless module plugs directly onto the main PCB of compatible SPC panels with metal housing. The kit also includes a stub antenna to mount on metal cabinets.

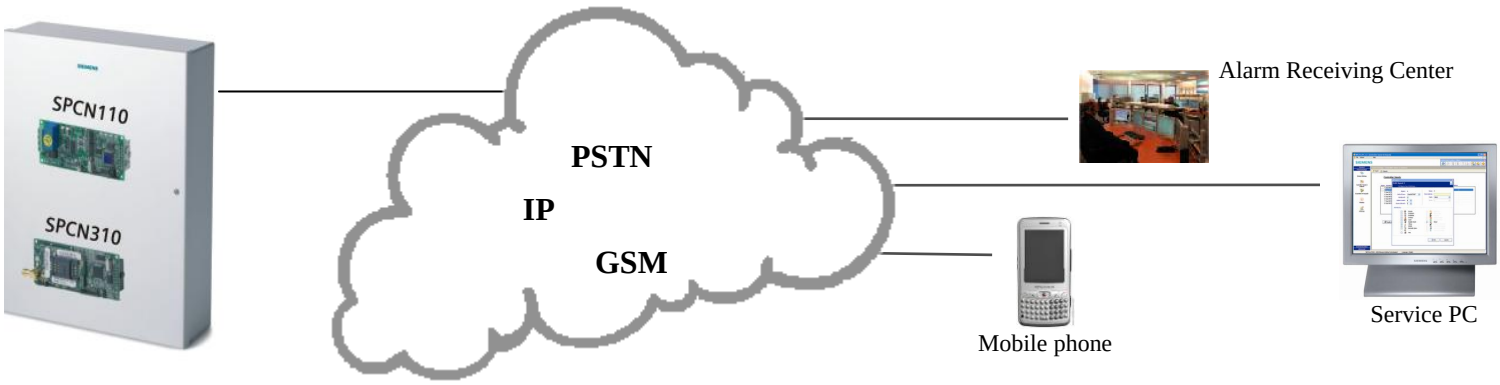
■ **SPCW112.000 SiWay RF-Module for LCD Keypad**
The SPCW112.000 SiWay module for the SPCK420/421 standard LCD keypad, extends the SPC system with a wireless access point for Intrunet wireless detectors and remote controls within reception range. The wireless module plugs directly on the keypad main PCB.

■ **SPCW130.100 SiWay RF-Expander**
The SPCW130.100 SiWay RF-expander is connected to the X-BUS and provides a wireless access point for the Intrunet wireless detectors and remote controls linked to the system.
The expander comes in a plastic housing with front tamper protection and also features an X-BUS status LED and on-board buzzer for easy device identification and extensive self-diagnostic capabilities.

■ **Compatible Intrunet wireless detectors and peripheral devices**[3]
A comprehensive range of wireless SiWay peripherals is supported by the SPC-Series:

IR160W6-10	PIR detector 18 m, black triplex mirror
IR65W6-10	PIR detector, ceiling mount
ADM-I12W1	PIR wireless 868 MHz detector
IGBW6-10	Glass break detector
IOPW6-11	Smoke detector
IMKW6-10	Magnet contact
IWFW6-10	Flood detectors
IRCW6-11	Remote control
IKPW6-10	Wireless LED keypad
IPAW8-10	Wireless Personal Alarm

[3] Please refer to the corresponding data sheet of Intrunet wireless detectors and peripheral devices for compatibility, technical details and availability for the required country.



The SPC panels offer multi-path communications via IP, GSM and PSTN. All the modems modules are pluggable to allow any combination to be used. The panel supports remote connectivity over all communication options, to provide engineering functions including configuration or diagnostics, and to the user the ability to remotely manage the premises.

SPCN110.000 PSTN Module, V90

The SPCN110.000 PSTN module (up to 56K) is compatible with the complete SPC panel range and plugs directly on the main PCB, removing the need for any additional wiring. The modem can take control of the line and communicates with a central station (ARC) using common format protocols (SIA, Contact ID). It also supports a PPP connection to the SPC Pro Software for remote programming and configuration up/download. The PSTN modem can be used as the primary source of communication or as a backup to a GSM modem.

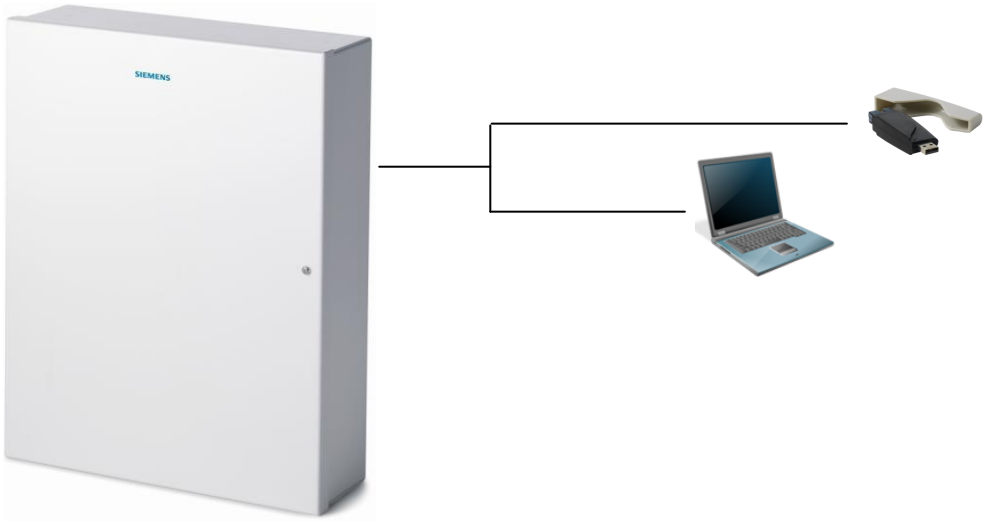
SPCN310.000 GSM Module incl. Antenna

The SPCN310.000 GSM module can be assigned to any mobile network by the insertion of a standard SIM card. The modem is compatible with the complete range of SPC panels and plugs directly on the main PCB removing the need for any additional wiring. The unit comes with an external antenna that fits on the cabinet.

The modem communicates with a central station (ARC) using common format protocols (SIA, Contact ID) or IP over GPRS to an SPC Com alarm receiver. It also supports a PPP connection to the SPC Pro Software for remote programming and configuration up/download. The SMS feature allows a user / engineer to be sent a predefined text when selected events occur in the system or receive predefined SMS commands for security system control. The GSM modem can be used as the primary source of communication or as backup to the PSTN modem or IP communication.

SPCW101.000 External Aerial Kit

The SPCW101.000 external antenna kit (868 MHz) allows the connection of a GSM or wireless module in a housing to an externally mounted antenna for better reception levels. The kit comes with a stub antenna, 2 m cable with connectors and a mounting bracket. The antenna connects to the GSM or wireless modules with a fitted SMA connector for external antenna option.



Clever engineering tools provide a range of online and offline methods for the fast and easy configuration of the SPC control panels.
The tool suite supports automated processes to reduce maintenance and administration costs of the installed SPC panel base during its product lifecycle.

SPCX410.000 SPC Fast Programmer
The Fast Programmer, SPCX410, provides a simple method of transferring configuration files from a PC (USB) to an SPC panel via the SPC Pro application, in addition to backing up configuration files from an SPC panel to the Fast Programmer, without a direct PC connection. This portable device has an on-board 1 MB flash memory, which typically can store in excess of 100 configuration files or a new firmware release (subject to file size) for on site controller firmware update.

SPCS310.000 SPC Pro Programming Tool
The SPCS310.000 configuration software allows the panels to be easily configured via PC in online or offline mode. In online mode the system can also be controlled (e.g. set/unset of areas or inhibit of zones) and event log and system status can be viewed.
The software connects via RS232, USB, IP or GSM/PSTN modems to the SPC controller. The SPC Fast Programmer is also supported.

■ Technical features

	SPC6330.320-L1
INTRUSION	
Programmable areas	60
Number of on-board zones	8
Max. number of hardwired zones	512
Supervised input	No EOL / Single EOL / Dual EOL / Tri EOL (Antimask PIR) / Inertia Sensors
EOL resistor	4K7 (default), other resistor combinations configurable
Number of on-board outputs	6
Max. number of outputs	512
Max. number of user codes	512
Event memory	10'000 intrusion events
Calendar based time channels	64 (53-week calendar)
Cause & Effects	1024 triggers / 512 mapping gates
Language	Multi-language support (de, en, es, fr, it, nl, sv, vls, plus 1 imported language file)
Voice assistance	Supported
Financial functions	Supported
FIELD BUS	
Bus connections	X-BUS (2 spurs or 1 loop)
Number of field devices[1)]	128 (32 Keypads, 32 Door-expanders, 64 Input/Output expanders)
CONNECTIVITY	
Web Server	HTTPS (embedded)
Pluggable Communication Interfaces	PSTN or GSM/GPRS modem (system supports 2 optional modems simultaneously)
Standard Communication Protocol	SIA, Contact ID, SMS messaging
Fast Programmer Support	Yes
Firmware Upgrade	Local / Remote upgrade for Controller and Expanders
SMS event notification / Panel control	With GSM option
Local and Remote configuration (SPC Pro support)	Via RS232, USB, PSTN, GSM, IP over Ethernet
Automated Remote Maintenance (SPC RM support)	Via PSTN, GSM, IP over Ethernet
Automated Site Administration (SPC Safe support)	Via IP over Ethernet
IP Alarm and Event transmission (SPC Com XT support)	IP over Ethernet / GPRS
ACCESS	
Event memory	10,000 access events
Max. number of doors (entry / entry-exit)	64 / 32
Max. number of door groups	32
Supported card technologies	EM4102 / SiPass, Wiegand 26-bits, HID Corporate 1000
Pass-back prevention (soft / hard)	Yes
ALARM VERIFICATION	
Number of verification zones	16 (combined audio and/or video devices)
Audio	Max. 16 audio devices (SPCV32x audio expander, SPCK623 keypad), up to 60 sec. pre / 60 sec. post audio recording
Video	Max. 4 IP cameras (Siemens CCIC1410 / CFMC1315, Generic), up to 16 pre / 16 post event images (by JPEG resolution 320 x 240, max. 1 frame / sec.)
WIRELESS	
Max. number of wireless zones [2)]	120
Max. number of wireless remote controls	512
Max. number of Intrunet wireless detectors received by any wireless receiver (recommended)	20

[1)] More I/O expanders can be addressed instead of a keypad or door expander, but number of programmable inputs / outputs cannot exceed specified system limits.
[2)] A wireless zone takes away a wired zone / optional RF receivers required.

■ Technical data

Controller and PSU	**SPC6330.320-L1 Intrusion CP, G3**	**SPCP332.300/333.300 Smart PSU with I/O-Expander**	**SPCP432.300/433.300 Smart PSU with 2-Door Expander**
Number of on-board zones	8	8	4, for door control
EOL resistor	Dual 4K7 (default), other resistor combinations configurable	Dual 4K7 (default), other resistor combinations configurable	
Max. number of hardwired zones	512		
Max. number of wireless zones [1)]	120		
Number of on-board open coll.	2, for internal / external bell (max. 400 mA each) 3, freely programmable (each max. 400 mA resistive switching current, supplied via auxiliary output)		
Number of on-board relays	1 strobe (30 VDC / 1 A resistive switching current)	2	2, for door control
		(single-pole changeover, 30 VDC / max. 1 A)	
Max. number of outputs	512		
Programmable areas	60		
Max. number of user codes	512		
Intrusion Event Logs	10,000 log events		
Access Event Logs	10,000 log events		
Field bus [2)]	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)	
Number of field devices [3)]	128 (32 Keypads, 32 Door-expanders, 64 Input/Output expanders)		
Tamper contact	Front spring tamper, back tamper	SPCP333: Front spring tamper, back tamper SPCP433/332/333: Front spring tamper	
Interfaces	2 X-BUS (2 spurs or 1 loop), 2 RS232 (to X-10 controller or external communication), 1 USB (PC connection), 1 SPC Fast Programmer, 1 Ethernet (RJ45)		2 card readers, Wiegand 26 bits (standard), Clock&Data and Wiegand 36 bit (proprietary)
Power supply	Type A (per EN50131-1), Integrated on controller PCB	Type A (per EN50131-1)	
Input voltage	230 V AC, +10 to -15 %, 50 Hz at transformer	230 V AC, +10 to -15 %, 50 Hz	
Operating current	Max. 200 mA at 12 VDC	Max. 95 mA (all relays activated)	
Quiescent current	Max. 170 mA at 12 VDC	Max. 77 mA	
Auxiliary power (nominal)	Max. 750 mA at 12 VDC	Max. 1500 mA at 12 VDC (750 mA per output)	
Output voltage	11-14 V DC in normal conditions [)]	11-14 VDC in normal conditions (mains powered and fully charged battery)	
Battery capacity / type	Max. 17 Ah / 12 V, YUASA NP17-12FR (17 Ah)	SPCP332/432: Max. 7 Ah /12 V, YUASA NP7-12FR (7 Ah), SPCP333/433: Max. 17 Ah / 12 V, YUASA NP17-12FR (17 Ah),	
Housing	Hinged metal housing (1.2 mm mild steel)	SPCP332/432: Small metal housing SPCP333/433: Hinged metal housing (1.2 mm mild steel)	
Dimensions (W x H x D in mm)	326 x 415 x 114 mm	264 x 357 x 81 (SPCP332/432) 326 x 415 x 114 (SPCP333/433)	
Weight	6.10 kg	4.70 kg (SPCP332/432) 6.30 kg (SPCP333/433)	
Colour	RAL 9003 (signal white)	RAL 9003 (signal white)	
Operating temperature	0 ~ +40 °C	0 ~ +40 °C	
Relative humidity	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	

[1)] A wireless zone takes away a wired zone / optional RF receivers required.
[2)] Max. 400 m between devices in chain configuration / cable types IYSTY 2 x 2 x Ø 0.6 mm (min.), UTP cat5 (solid core) or Belden 9829.
[3)] More I/O expanders can be addressed instead of a keypad or door expander, but number of programmable inputs / outputs cannot exceed specified system limits.

Expanders	**SPCE650.100/652.100 Expander, 8 Inp./2 Outp.**	**SPCE450.100/452.100 Expander, 8 Relay-Outputs**	**SPCV320.000 Audio expander with 4 inputs and 1 output**	**SPCV321.000 Audio expander with 4 inputs and 1 line output**
Operating voltage	9.5 ~ 14 VDC	9.5 ~ 14 VDC	9.5 ~ 14 VDC	9.5 ~ 14 VDC
Field bus [1)]	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)
Tamper contact	On-board front spring tamper, back tamper (SPCE652)	On-board front spring tamper, back tamper (SPCE452)	Front / back tamper switch	Front / back tamper switch
Operating temperature	-10 °C to 50 °C	-10 °C to 50 °C	-10 ~ +50 °C	-10 ~ +50 °C
Relative humidity	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non condensing)	Max. 90 % (non condensing)
Color	RAL 9003 (signal white)	RAL 9003 (signal white)	RAL 9002 (grey white)	RAL 9002 (grey white)
Housing	Plastic Housing (ABS)	Plastic Housing (ABS)	Plastic housing (ABS)	Plastic housing (ABS)
Dimensions (W x H x D in mm)	200 x 153 x 47 (Housing) 150 x 82 x 20 (PCB)	200 x 153 x 47 (Housing) 150 x 82 x 20 (PCB)	105 x 145 x 70 mm	105 x 145 x 70 mm
Weight	0.35 kg	0.40 kg	0.240 kg	0.240 kg
Operating current	Max. 80 mA at 12 VDC (all relays operated)	Max. 190 mA at 12 VDC (all relays operated)	Max. 510 mA at 12 VDC (without satellites)	Max. 510 mA at 12 VDC (without satellites)
Quiescent current	Max. 40 mA at 12 VDC	Max. 40 mA at 12 VDC	Max. 40 mA at 12 VDC (without satellites)	Max. 40 mA at 12 VDC (without satellites)
Number of on-board zones	8		4	4
EOL resistor	Dual 4K7 (default), other resistor combinations configurable		Dual 4K7 (default), other resistor combinations configurable	Dual 4K7 (default), other resistor combinations configurable
Number of on-board open. collector outputs			1 (open collector, max. 400 mA resistive switching current)	
Number of on-board relays	2 (single-pole changeover relays, 30 VDC / max. 1 A resistive switching current)	8 (single-pole changeover relays, 30 VDC / max. 1 A resistive switching current)		
Expansion			Max. 3 audio satellites (WAC11 speaker / microphone, WAS11 microphone)	Max. 3 audio satellites (WAC11 speaker / microphone, WAS11 microphone)
Number of on-board zones			4	4
Number of on-board open coll.			1, freely programmable (max. 400 mA resistive switching current)	
LED indicators			1 (red)	1 (red)
Audio			Loudspeaker: 2W / 16 Ω, Microphone: Foil electret condenser microphone with preamplifier (3 KHz bandwidth)	Loudspeaker: 2W / 16 Ω, Microphone: Foil electret condenser microphone with preamplifier (3 KHz bandwidth)
Audio outputs				1 line output (100 Ω / 0.775V RMS, suitable for connection to audio pre-amplifier).

[1)] Max. 400 m between devices in chain configuration / cable types IYSTY 2 x 2 x Ø 0.6 mm (min.), UTP cat5 (solid core) or Belden 9829

Expanders	**SPCA210.100 2-Door Expander**	**SPCW130.100 SiWay RF-Expander**	**SPCE120.100 Indication Expander**	**SPCE110.100 Key Switch Expander**
LED indicators	4 outputs (1 void and 1 valid per reader)		16 tri-color LEDs	2 tri-color LEDs
Special keys			4 function keys, freely programmable	
Operating voltage	9.5 ~ 14 VDC	9.5 ~ 14 VDC	9.5 ~ 14 VDC	9.5 ~ 14 VDC
Field bus [1)]	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)
Tamper contact	On-board front spring tamper	On-board front spring tamper	On-board front / back tamper switch	On-board front / back tamper switch
Operating temperature	-10 °C to 50 °C	-10 °C to 50 °C	-10 °C to 50 °C	-10 °C to 50 °C
Relative humidity	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)
Color	RAL 9003 (signal white)	RAL 9003 (signal white)	RAL 9003 (signal white)	RAL 9003 (signal white)
Housing	Plastic Housing (ABS)	Plastic Housing (ABS)	Plastic Housing (Polycarbonate)	Plastic Housing (Polycarbonate)
Dimensions (W x H x D in mm)	200 x 153 x 47 (Housing) 150 x 82 x 20 (PCB)	200 x 153 x 47 (Housing) 150 x 82 x 20 (PCB)	112 x 92 x 28	112 x 92 x 38
Weight	0.36 kg	0.34 kg	0.19 kg	0.27 kg
Operating current	Max. 80 mA at 12 VDC (all relays operated)	Max.60 mA at 12 VDC	Max. 70 mA at 12 VDC (all LEDs operated)	Max. 50 mA at 12 VDC (relay and LEDs operated)
Quiescent current	Max. 45 mA at 12 VDC	Max. 60 mA at 12 VDC	Max. 30 mA at 12 VDC	Max. 30 mA at 12 VDC
Card reader			Integrated 125 kHz reader (EM 4102)	
Radio Module		Integrated SiWay RF receiver (868 MHz)		
Number of on-board zones	4, for door release switch (DRS) and door position switch (DPS), or freely programmable		1	
EOL resistor	Dual 4K7 (default), other resistor combinations configurable		Dual 4K7 (default), other resistor combinations configurable	
Number of on-board relays	2, for door locks or freely programmable (single-pole changeover, 30 VDC / max. 1 A resistive switching current)			1 (single-pole changeover, 30 VDC / max. 1 A resistive switching current)
Programmable key input				3 key positions (2-0-1 in 90° steps, cylinder type KABA1008C)
Number of card readers	2			
Card reader protocols	Wiegand 26 bit (standard), Wiegand 36 bit (proprietary), Clock&Data (proprietary)			

Keypads	SPCK420.100 LCD-Keypad, 2x16 Characters	SPCK421.100 LCD-Keypad, 2x16 Char, Card Reader	SPCK620.100 Comfort Keypad	SPCK623.100 Comfort Keypad w. Audio/Card Reader
LED indicators	3 status LEDs	3 status LEDs	5 status LEDs	5 status LEDs
Special keys	2 soft keys, 1 multi-dimensional navigation key	2 soft keys, 1 multi-dimensional navigation key	4 soft keys, 1 multi-dimensional navigation key	4 soft keys, 1 multi-dimensional navigation key
Operating voltage	9.5 ~ 14 VDC	9.5 ~ 14 VDC	9.5 ~ 14 VDC	9.5 ~ 14 VDC
Field bus [1)]	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)	X-BUS on RS-485 (307 kb/s)
Tamper contact	On-board front / back spring tamper	On-board front / back spring tamper	On-board front / back tamper switch	On-board front / back tamper switch
Operating temperature	5° ~ +40 °C	5° ~ +40 °C	5° ~ +40 °C	5° ~ +40 °C
Relative humidity	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)
Color	RAL 9003 (signal white)	RAL 9003 (signal white)	RAL 9003 (signal white)	RAL 9003 (signal white)
Housing	Plastic Housing(ABS)	Plastic Housing (ABS)	Plastic Housing (Polycarbonate)	Plastic Housing (Polycarbonate)
Dimensions (W x H x D in mm)	148 x 85 x 33	148 x 85 x 33	112 x 185 x 28	112 x 185 x 28
Weight	0.21 kg	0.21 kg	0.38 kg	0.38 kg
Operating current	Max. 90 mA at 12 VDC (backlight, LEDs, sounder operated)	Max. 110 mA at 12 VDC (backlight, LEDs, sounder, reader operated)	Max. 155 mA at 12 VDC (backlight, LEDs, sounder operated)	Max. 230 mA at 12 VDC (backlight, LEDs, voice annunciation operated)
Quiescent current	Max. 45 mA at 12 VDC	Max. 80 mA at 12 VDC	Max. 55 mA at 12 VDC	Max. 110 mA at 12 VDC
Card reader		Integrated 125 kHz reader (EM 4102)		Integrated 125 kHz reader (EM 4102)
Radio Module	Optional (SPCW112)	Optional (SPCW112)		
Audio				Supported via integrated speaker and microphone

[1)] Max. 400 m between devices in chain configuration / cable types IYSTY 2 x 2 x Ø 0.6 mm (min.), UTP cat5 (solid core) or Belden 9829.

Controller Plug on Modules	SPCN110.000 PSTN Module, V90	SPCN310.000 GSM Module incl. Antenna	SPCW110.000 SiWay RF-Kit for Panel	SPCW111.000 SiWay RF Module for Panel	SPCW112.000 SiWay RF Module for Keypad
Network connection	PSTN (analogue telephone network)	GSM / GPRS (dual band 900/1800 MHz)			
Operating current	Max.35 mA (communication active)	Max.130 mA	Max.10 mA	Max.10 mA	Max.10 mA
Quiescent current	Max. 25 mA	Max. 130 mA	Max. 10 mA	Max. 10 mA	Max. 10 mA
Operating temperature	-10 °C ~ 50 °C	-10 °C ~ 50 °C	-10 °C ~ 50 °C	-10 °C ~ 50 °C	-10 °C ~ 50 °C
Relative humidity	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)	Max. 90 % (non-condensing)
Mounting	Plug on module to SPC controller	Plug on module to SPC controller	Plug on module to SPC controller, antenna mounted on metal cabinet	Plug on module to SPC controller with plastic housing / cabinet.	Plug on module to SPC keypads SPCK420/421
Dimensions (W x H x D in mm)	90 x 38 x 25 (PCB)	90 x 38 x 25 (PCB)	55 x 22 x 20 (PCB)	55 x 22 x 20 (PCB)	55 x 22 x 20 (PCB)
Weight	0.03 kg	0.03 kg	0.05 kg	0.01 kg	0.01 kg
Radio Module			SiWay RF receiver (868 MHz)	SiWay RF receiver (868 MHz)	SiWay RF receiver (868 MHz)

Engineering and Maintenance Tools	SPCX410.000 SPC Fast Programmer	SPCS310.000 SPC Pro Programming Tool
Interfaces	1 x USB (to PC), 1 x 10-pin connector (to SPC controller)	
Communication protocol		Proprietary (via RS232, USB, TCP/IP on Ethernet, PSTN, GSM, Data transfer from/to SPC Fast Programmer)
System compatibility	PC: Windows 2000, XP, Vista, 7 SPC controller: SPC4000/SPC5000/SPC6000	Single PC solution, Running on PC with XP/Vista, 7 Support of SPC4000/SPC5000/SPC600
Memory	1 MB	Min. 1 GB required
Database		Local file storage in compressed format.
Housing	Plastic Housing (ABS)	

Details for ordering

Type	Item No.	Designation	Dimensions (W x H x D in mm)	Weight
SPC6330.320	S54541-C105-C100	SPC6330.320-L1 Intrusion CP, 8-512 zones, Ethernet, G3 metal housing	326 x 415 x 114	6.10 kg
SPCP332.300	S54545-C102-A100	SPCP332.300 Smart PSU (7 Ah) with I/O-Expander	264 x 357 x 81	4.70 kg
SPCP333.300	S54545-C101-A100	SPCP333.300 Smart PSU (17 Ah) with I/O-Expander	326 x 415 x 114	6.30 kg
SPCP432.300	S54545-C103-A100	SPCP432.300 Smart PSU (7 Ah) with 2-Door Expander	264 x 357 x 81	4.70 kg
SPCP433.300	S54545-C104-A100	SPCP433.300 Smart PSU (17 Ah) with 2-Door Expander	326 x 415 x 114	6.30 kg
SPCK420.100	S54543-F101-A100	SPCK420.100 LCD-Keyp., 2x16 Char.	148 x 85 x 33	0.21 kg
SPCK421.100	S54543-F102-A100	SPCK421.100 LCD-Keyp., 2x16 Char., Card Reader	148 x 85 x 33	0.21 kg
SPCK620.100	S54543-F110-A100	SPCK620.100 Comfort Keypad	112 x 185 x 28	0.38 kg
SPCK623.100	S54543-F111-A100	SPCK623.100 Comfort Keypad w. Audio/Card Reader	112 x 185 x 28	0.38 kg
SPCE110.100	S54542-F104-A100	SPCE110.100 Key Switch Expander	112 x 92 x 38	0.27 kg
SPCE120.100	S54542-F105-A100	SPCE120.100 Indication Expander with Card Reader	112 x 92 x 28	0.19 kg
SPCE650.100	S54542-F101-A100	SPCE650.100 Expander, 8 Inp./2 Outp.	200 x153 x 47 (Housing) 150 x 82 x 20 (PCB)	0.35 kg
SPCE652.100	S54542-F106-A100	SPCE652.100 Expander, 8 Inp./2 Outputs, back tamper	200 x153 x 47 (Housing) 150 x 82 x 20 (PCB)	0.35 kg
SPCE450.100	S54542-F103-A100	SPCE450.100 Expander, 8 Relay-Outputs	200 x153 x 47 (Housing) 150 x 82 x 20 (PCB)	0.40 kg
SPCE452.100	S54542-F107-A100	SPCE452.100 Expander, 8 Relay-Outputs, back tamper	200 x153 x 47 (Housing) 150 x 82 x 20 (PCB)	0.40 kg
SPCV320.000	S54542-F108-A100	SPCV320.000 Audio expander with 4 inputs and 1 output	105 x 145 x 70	0.24 kg
SPCV321.000	S54542-F109-A100	SPCV321.000 Audio expander with 4 inputs and 1 line output	105 x 145 x 70	0.24 kg
SPCA210.100	S54547-A101-A100	SPCA210.100 2-Door Expander	200 x153 x 47 (Housing) 150 x 82 x 20 (PCB)	0.36 kg
SPCW130.100	S54554-F101-A100	SPCW130.100 SiWay RF-Expander	200 x153 x 47 (Housing) 150 x 82 x 20 (PCB)	0.34 kg
SPCW110.000	S54554-B101-A100	SPCW110.000 SiWay RF -Kit for Panel with Metal Housing	50 x 22 x 20 (PCB)	0.05 kg
SPCW111.000	S54554-B102-A100	SPCW111.000 SiWay RF-Module for Panel with Plastic Housing/Cover	50 x 22 x 20 mm (PCB)	0.01 kg
SPCW112.000	S54554-B103-A100	SPCW112.000 SiWay RF-Module for standard LCD keypad	50 x 22 x 20 mm (PCB)	0.01 kg
SPCN110.000	S54550-B101-A100	SPCN110.000 PSTN Module, V90	90 x 38 x 25 (PCB)	0.03 kg
SPCN310.000	S54550-B102-A100	SPCN310.000 GSM Module incl. Antenna	90 x 38 x 25 (PCB)	0.03 kg
SPCW101.000	S54559-B101-A100	SPCW101.000 External Aerial Kit	200 (L)	0.09 kg
SPCX410.000	S54559-B102-A100	SPCX410.000 SPC Fast Programmer	91 x 32 x 17	0.04 kg
SPCS310.000	Supplied with panel	SPCS310.000 SPC Pro Programming Tool	n. a.	n. a.
IB42-EM	S24246-D4901-A1	EM laminated card without print	86 x 54 x 1	0.01 kg
IB44-EM	S24246-D4902-A1	Key tag	36 x 30 x 7	0.01 kg
SPCY130.000	S54559-B116-A100	SPCY130.000 Backtamper kit G3 cabinet	n. a.	0.06 kg

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