



## SI220 Control Unit

Perfect building protection inside and outside

---

- Multifunctional intrusion control unit
- Modular design
- Extensive assortment of functional modules
- User friendly operation with card reader "plus"
- Flexible configuration
- Communication via PSTN or ISDN telephone network, IP or GSM (GPRS) "plus"
- 6 partitions which can be combined
- 8 - 48 individually programmable inputs
- 8 - 49 individually programmable outputs
- Up to 49 freely definable users
- 8 calendars on weekly time base
- Various different alarm verification methods
- Remote configuration and maintenance using Sylcom® software
- Integration capability for wireless system

## Sintony® 220



The **multifunctional intrusion control unit** not only provides specific functions for high security demands. It allows also additional security applications such as audio alarm verification and local video surveillance.

The **modular design** with an extensive **assortment** of functional modules can be adapted to the customer needs and grow with increasing requirements.

**"Plus"** **User friendly operation** for the safe and easy daily use is supported by the stylish keypads with card reader, key switch or annunciation modules with function keys.

**Flexible configuration** allows for adjustment of the system to fit individual processes, topologies or security concepts.

**"Plus"** **A wide variety of communication options** allows for cost-efficient solutions for configuration, maintenance or alarm transmission using a PSTN, ISDN, IP or GSM (GPRS) network.

**6 partitions** and up to **36 rooms (6 per partition)** as well as free configuration of partitions dependencies allow for flexible transfer and administration of customer specific organizational structures in the system.

The **48 inputs** and **49 outputs** can be programmed as needed. This can be used to monitor and control numerous points in a medium sized building, to activate system functions or to signalize events.

**8 calendars** with several freely programmable weekly time tables enable an automatic set and unset of each partition and 2 specific outputs.

**Various types of alarm verification** help prevent false alarms caused by incorrect operation or detection, thereby avoiding stressful situations and costly intervention measures. Several events can be filtered before the alarm is signaling or the alarm transmission can either be delayed or confirmed. In addition to this, the audio and video components enable listening, speaking and seeing events inside the building.

The **Sylcom® Software** can be used for configuration and maintenance of the Sintony control unit. The system can be accessed locally or via analog and IP networks. Sylcom can also be configured as an un-operated parameter server, which the control unit can access to update configuration for optimum system data management.

Siemens offers a **full range of wireless devices** which can be seamlessly integrated into Sintony control unit. This embedded system saves installation time and efforts when covering locations that are difficult to access or expanding an existing system.

## Overview system technology

**NOTE:** Described function set requires firmware release A8 or higher.

	Standard SI220 (option)	Expandable up to
<b>Inputs and outputs</b>		
Free programmable inputs	8	48
Free programmable outputs	8	49
- Open collector (max. 12 V / max. 150 mA / 30R)	4	32
- Open collector (max. 12 V / max. 500 mA / 5R)	1	1
- Relay, single pole (24 V / 2 A switching power)	1	5
- Relay, dual pole (24 V / 2 A switching power)	1	5
- Relay, single pole (48 V / 5 A switching power)	1	6
<b>Functions</b>		
Partitions with independent alarm handling	6	
Rooms per partition for independent setting and unsetting / Total rooms	6 / 36	
Physical input types (freely selectable for each input)	6	
Logical input types (freely selectable for each input)	33	
Logical output types (freely selectable for each output)	48	
Automatic test function for seismic detectors	Yes	
Event memory with time stamp and additional information	500	
PINs for users / installer	49 / 1	
Double identification capability / max. number of users with double ID	Yes / 24	
Week calendar for partitions and 2 outputs	8	
Local RS232 printer and PC connection	(SAQ11)	
Remote maintenance and configuration	(SAS31)	
Plain text programming using control unit or PC	Yes	
<b>Operation</b>		
LCD keypad	(SAK41 / SAK51 / SAK52 / SAK53)	7
LCD keypad with card reader	(SAK84)	
Fast setting without code	Yes	
Plain text user support	Yes	
<b>Communication</b>		
Analog PSTN dialing device	(SML51)	
Digital ISDN dialing device	(SML61)	
IP communication for alarms and configuration	(SMN42 / SMN43)	
IP backup transmission over GSM (GPRS)	(SMN43)	
SMS event transmission	(SMN43)	
Voice alarm via telephone	(WMA11)	
System control via telephone	(WMA11)	
Multi-alarm protocol transmission	Yes	
<b>Line Extensions</b>		
Input/output module	(SAT12 / SMT12)	10
Output Modules	(SMT44)	2
<b>Power Supplies</b>		
Integrated power supply	1	
Supervised external power supplies	(SAP 20 / SAP14)	5
Battery discharge protection	(SMX26)	
Monitoring of Battery-, Mains, Tamper and E-Bus	Yes	
Ready to mount modules in the housing	Yes	
<b>Audio and Video Verification Functions</b>		
Independent alarm verification zones	8	
Event-controlled verification zones	Yes	
Call-back for alarm verification	Yes	
2-way audio bus for alarm verification (listen and speak)	(WMA11)	
Video alarm verification with image storage	(WMV12)	
Local monitoring or recording of video bus	(WAV61)	
Remote assistance (voice support)	Yes	
<b>Wireless</b>		
RF Gateway on E-Bus	(Option)	Up to 3
Addressable wireless inputs (takes away wired inputs)	12	32
Wireless remote controls (key fobs)	7	21



The Sintony control unit can be equipped with stylish, user friendly operating and indication devices for safe and easy operation. The keypads with card reader also offer the expansion capability with additional function modules for high level applications. And even better, these function modules can also be used without keypad.



**"Plus"**

### SAK84 LCD Keypad with Card Reader and Audio

The SAK84 is equipped with a proximity card reader (125 kHz) for easy user access, speaker/microphone for alarm verification, soft keys and large graphical LCD for easy operation. The functionality can be enhanced with add-on module SAK9S1.



**"Plus"**

### SAK9S1 Universal Key Switch Module

The SAK9S1 is a universal key switch module. In combination with SAK84 or SAK9L1 it's used to release the keypad for operation. In standalone mode the function of LED's and key switch position can be freely defined by the control unit. The module also provides a programmable buzzer for acoustic notification.

Standalone  
Mode



**"Plus"**

### SAK9L1 Universal Annunciation Module with Function Keys

The SAK9L1 is a universal annunciation module with 16 LED's and 4 function keys. In standalone mode the function of LED's and keys can be freely defined by the control unit. The module also provides a programmable buzzer for acoustic notification.

Standalone  
Mode

With the keypad range there is always an answer to customer needs and application. Combinations of keypad with card reader, speaker and microphone or flaps are available, and all have plain text display to support the easy operation.



### SAK41 LCD Keypad with Flap

The SAK41 is equipped with a 2-line display, each consisting of 16 characters, and backlight for display and keys. The 5 LEDs display the most important system states such as on/off, war, "unset", "part set", "full set", alarm etc. The keypad is equipped with a cover.



### SAK51 LCD Keypad

The SAK51 is equipped with a 2-line display, each consisting of 16 characters, and backlight for display and keys. The 5 LEDs display the most important system states such as on/off, war, "unset", "part set", "full set", alarm etc.



### SAK52 LCD Keypad with Audio


The SAK52 is identical to the SAK51. The added audio function (microphone and loudspeaker) supports applications such as alarm verification and remote assistance.



### SAK53 LCD Keypad with Flap and Large Display

The SAK53 is equipped with a removable cover and an extra large 2-line display, each consisting of 16 characters, and backlight for display and keys. The display and the keys are fitted with backlights. The 5 LEDs display the most important systems states such as on/off, war, "unset", "part set", "full set", alarm etc.

## E-Bus



A large assortment of plug-in modules and peripherals such as LCD keypads, addressable expanders for inputs and outputs, card readers or external power supplies are available for professional installation. The control unit feeds, controls and monitors the modules via E-Bus, which can be installed in any topology in the building.



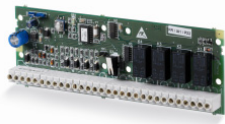
### **SAT12 Transponder (4 Inputs / 2 Outputs)**

The SAT12 is used to expand the Sintony control unit by 4 programmable inputs and 2 outputs via the E-Bus. 2 of these inputs can be used to connect glass break detectors.



### **SMT12 Transponder Board (4 Inputs / 2 Outputs)**

The SMT12 is identical to SAT12, but without housing. It is installed directly in the control unit housing, in the external supply or in the universal housing unit SAH24.



### **SMT44 Output Transponder Board (8 Outputs)**

The SMT44 is used to expand the Sintony control unit by 8 additional outputs (4 open collectors and 4 relays). It is installed in the control unit housing, in the external supply or in the universal housing unit SAH24.

This cost-effective type of installation allows the placement of the modules where they are needed in the building. The modules can be addressed at the push of a button. In addition to this, the E-Bus can be separated into independent, galvanic isolated partitions for increased security.



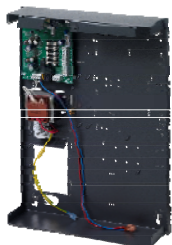
### **SAR11 E-Bus Isolator / Repeater**

The SAR11 is used to divide the incoming E-Bus into two independent, electrically separated supplied branches. In addition to this, the E-Bus signals are rebuilt and can be transmitted over large distances.



### **SMR11 E-Bus Repeater / Isolator Board**

The SMR11 is identical to SAR11, but without housing. It is installed directly in the control unit in the external supply or in the universal housing unit SAH24.



### **SAP14 External Power Supply 12 V DC / 1.3 A**

The SAP14 external power supply includes a bus-monitored 12 V DC / 1.3 A switched supply, 4 fused 12 V outputs and a freely programmable relay output with 48 V / 5 A. The housing offers additional space for 4 SMT12/SMR11 boards and either a 17 Ah battery or a 7.2 Ah battery with 2 SMX13 relay boards.



### **SAP20 External Power Supply 12 V DC / 2.3 A**

The SAP20 external power supply includes a bus-monitored 12 V DC / 2.3 A switched supply, 4 fused 12 V outputs and a freely programmable relay output with 48 V / 5 A. The housing offers additional space for 7 SMT12/SMR11 boards and either a 27 Ah battery or a 7.2 Ah battery with 2 SMX13 relay boards.



E-Bus  
 Audio bus  
 Video bus

The Sintony intrusion control unit provides an integrated solution for remote acoustic and optical alarm verification. The building can be divided in up to 8 different verification zones, in which an alarm receiving center operator can listen or see after an alarm and communicate with people. The control unit provides the option of requesting remote support using the keypad audio function.



**WMA11 Audio Board**

The WMA11 audio module is the interface to the audio bus and is simply mounted on the control unit main board. The audio bus allows a 2-way communication of acoustic signals between the audio components and the control unit. The module also decodes the DTMF signals of a telephone, thus enabling interaction with control unit via telephone keys.



**WAC12 Loudspeaker/Microphone (addressable)**

The WAC12 is a combined loudspeaker/microphone module for 2-way alarm verification and is controlled via the E-Bus. It's possible to connect up to 3 WAC11 or WAS11 microphone/ loudspeaker units to the WAC12 to extend acoustic coverage.



**WAC11 Loudspeaker/Microphone**

The WAC11 is a combined microphone and speaker which can be connected either to an addressable WAC12 or directly to the WMA11 audio board. The WAC11 has an LED which indicates recording mode by illuminating whilst the microphone is activated. The WAC11 uses the same housing as the WAC12.



**WAS11 Microphone unit**

The WAS11 microphone can be either connected to an addressable WAC12 device or directly to the WMA11 audio board. The sensitivity of the microphone can be adjusted.



**SAK52 LCD Keypad with Audio**

The SAK52 is identical to the SAK51. The added audio function (microphone and loudspeaker) supports applications such as alarm verification and remote assistance.

SAK84 provides the same audio verification features as SAK52.



The detectors can be linked to the verification zone so that the allocated module within the building is activated directly following an alarm. For shorter distances the audio bus and the video bus can be installed in the same cable as the E-Bus for simple, cost-effective alarm verification.



#### WMV12 Video Board

The WMV12 video board is the interface to the video bus and is simply mounted on the control unit main board. A monitor can be connected to check camera availability. In the case of alarm, up to 6 images (b/w) from the allocated camera are stored digitally and transferred to the alarm receiving center with alarm notification. The WMV12 is not required for local video surveillance.



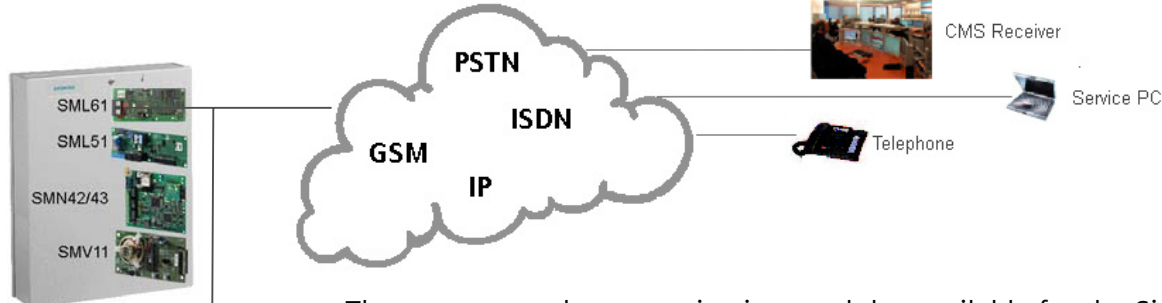
#### WAV61 Monitor Interface for Video-Bus

The WAV61 monitor interface enables connection of a monitor or video recorder to the video bus for local video monitoring. It can be used to view and record the existing images from WAT21.



#### WAT21 Video/Audio Transponder

The WAT21 video / audio transponder is used to connect a Siemens or industry-standard analogue video camera with standard resolution to the video bus. In addition to this the module has interfaces for the microphone/loudspeaker modules WAC11 or WAS11. A relay output also signalizes activation of the interface subsequent to an alarm (e.g. to switch on external infrared lighting).



There are several communication modules available for the Sintony intrusion control unit, which can be implemented for alarm transmission, configuration and maintenance. In addition, the IP/GSM (GPRS) module provides redundant IP connection via GSM (GPRS) and SMS event messages. And the Sylcom Software enables a cost-effective maintenance of the system.



#### SML51-TBR Dialer Board PSTN

The SML51TBR dialer board connects the control unit to the analog telephone network (PSTN). It supports various remote applications such as alarm transmission, audio/video alarm verification, configuration or maintenance. Used in connection with the SMV11, individual voice messages can also be transmitted.



#### SML61 Dialer Board ISDN

The SML61 dialer board connects the control unit to the digital telephone network (ISDN). It supports various remote applications such as alarm transmission, audio/video alarm verification, configuration or maintenance. Used in connection with the SMV11, individual voice messages can also be transmitted.



#### SMV11 Voice Board

The SMV11 voice board stores up to 6 alarm messages, 4 help messages and an identification message and is simply mounted on the control unit main board. The messages are individually recorded with the integrated microphone.



#### <sup>"Plus"</sup> SMN42 IP Interface Board

The SMN42 IP-interface connects the control unit with IP networks and is easily plugged on the control unit main PCB. It supports various different remote applications such as alarm transmission, configuration or maintenance.



#### <sup>"Plus"</sup> SMN43 IP / GSM (GPRS) Interface Board

The SMN43 IP/GSM (GPRS) interface connects the control unit to the IP and GSM (GPRS) network and is easily plugged on the control unit main PCB. It supports the various different remote applications such as alarm transmission, configuration or maintenance. The GSM (GPRS) path is used for IP alarm transmission backup over GPRS. In addition, the events can also be transmitted as SMS to a mobile phone.

## Technical specifications

	SI220	SAP20	SAP14
Mains voltage	230 V AC +10 %/-15 %, 50 Hz	230 V AC +10 %/-15 %, 50 Hz	230 V AC +10 %/-15 %, 50 Hz
Fuse	160 mA T (Mains)	315 mA T (Mains)	160 mA T (Mains)
Power consumption	max. 34 VA (at 230 V AC)	max. 63 VA (at 230 V AC)	max. 34 VA (at 230 V AC)
Operating voltage	10.5 – 15 V DC	10.5 – 15 V DC	10.5 – 15 V DC
Power supply	SMP14: dual switching power supply	SMP20: dual switching power supply	SMP14: dual switching power supply
Output voltage (nominal)	SMP14: 13.7 V DC	SMP20: 13.7 V DC	SMP20: 13.7 V DC
Supply current	SMP14: 1.3 A	SMP20: 2.3 A	SMP14: 1.3 A
Output current	500 mA for external loads	1.5 A for external loads	600 mA for external loads
Battery supply	SMP14: max. 700 mA	SMP20: max. 800 mA	SMP14: max. 700 mA
Battery capacity	max. 17 Ah / 12 V	max. 27 Ah / 12 V	max. 17 Ah / 12 V
Battery type	YUASA, Type NP17-12 recommended	YUASA, Type NP24-12 recommended	YUASA, Type NP17-12 recommended
Inputs	8		
EOL resistor	4.7 kOhm		
Outputs	8	1	1
Number of on-board open coll.	4 (max. 12 V / max. 150 mA / 30 R) 1 (max. 12 V / max. 500 mA / 5 R)		
Number of on-board relays	1 single-pole, 24 V / 2 A 1 dual-pole, 24 V / 2 A 1 single-pole, 48 V / 5 A (switching power)	1 single-pole, 48 V / 5 A (switching power)	1 single-pole, 48 V / 5 A (switching power)
Field bus	E-Bus (max. 1000 m total cable length, repeater SAR11/SMR11 required if length exceeds 500 m). Cable type IYSTY 2 x 2 x Ø 0.6 mm (min.).		
Operating temperature <sup>1)</sup>	0 to +40 °C	0 to +40 °C	0 to +40 °C
Housing protection	IP30	IP30	IP30
Housing material	Steel, 1.5 mm	Steel, 1.5 mm	Steel, 1.5 mm
Color	RAL 7035	RAL 7035	RAL 7035

	SAT12 / SMT12	SMT44	SAR11 / SMR11
Operating voltage	9 – 15 V DC	9 – 15 V DC	9 – 15 V DC
Supply	via E-Bus	via E-Bus	via E-Bus
Current consumption (12 V DC)	Min. 7 mA Max. 32 mA	Min. 6 mA Max. 62 mA	Min. 14 mA Max. 48 mA
Output current			Max. 400 mA per E-Bus branch
Inputs	4		
EOL resistor	4.7 kOhm		
Outputs	2		
Number of on-board open coll.	2 (max. 12 V / max. 150 mA / 35 R)	4 (max. 12 V / max. 150 mA / 30 R)	
Number of on-board relays		1 single-pole, 24 V / 2 A (switch power)	
Card reader protocols			
Readers			
Operating temperature <sup>1)</sup>	-10 to +55 °C	-10 to +55 °C	-10 to +55 °C
Housing protection	IP30	IP30	IP30
Housing material <sup>l)</sup>	ABS		ABS
Color	RAL 9002		RAL 9002

## Technical specifications

	SAK84	SAK9L1	SAK9S1
Operating voltage	9 – 15 V DC	9 – 15 V DC	9 – 15 V DC
Supply	via E-Bus	via E-Bus	via E-Bus / Ext. 12 V DC (in Isolated mode)
Current consumption (12 V DC)	Min. 48 mA Max. 95 mA	tba	tba
LCD display	128 x 64 dots		
Status LEDs	5	16	2
Special function keys	4 soft keys and 5 dedicated keys	4	
Speaker, Microphone	Built in		
Buzzer		Integrated	Integrated
Readers	125 kHz, EM 4102 or compatible (e.g. SiPASS, CerPASS)		
Card read distance	10mm		
Bus connections	E-Bus, I2C-Bus (to optional SAK9S1)	E-Bus (for standalone mode), IC2 Bus (for linked mode)	E-Bus (for standalone mode), IC2 Bus (for linked mode), no bus required for isolated mode
Configuration	Occupies 1 keypad address	Standalone mode: flexible assignment of device addresses. Occupies max. 4 SMT12 and 1 SMT44 addresses.	Standalone mode: occupies 1 SMT12 address
Inputs		1 (standalone mode)	0 (linked mode), 1 (standalone / isolated mode)
Outputs		1 (in standalone mode)	0 (in linked mode), 1 (in standalone mode), 2 (in isolated mode)
Number of on-board open coll.			Isolated mode: 1 (max. 12 V / max. 120 mA / 5 R)
Number of on-board relays		Standalone mode: 1 single-pole, 24 V / 2 A (switching power)	Standalone/Isolated mode: 1 single-pole, 24 V / 2 A (switching power)
Programmable key input			3 key positions (0, 1, 2 in 90° steps), Pos 1,2 as pulse or latch). Cylinder type KABA1008C
Operating temperature <sup>1)</sup>	0 to +55 °C	-10 to +55 °C	-10 to +55 °C
Housing protection	IP30	IP30	IP30
Housing material <sup>1)</sup>	Polycarbonate	Polycarbonate	Polycarbonate
Color	RAL 9003	RAL 9003	RAL 9003

## Technical specifications

	SAK41	SAK51	SAK52	SAK53
Operating voltage	9 – 15 V DC	9 – 15 V DC	9 – 15 V DC	9 – 15 V DC
Supply	via E-Bus	via E-Bus	via E-Bus	via E-Bus
Current consumption (12 V DC)	Min. 23 mA Max. 112 mA	Min. 23 mA Max. 112 mA	Min. 23 mA Max. 126 mA	Min. 23 mA Max. 112 mA
LCD display	2 x 16 characters	2 x 16 characters	2 x 16 characters	2 x 16 characters
Speaker, Microphone			Built in	
Operating temperature <sup>1)</sup>	0 to +55 °C	0 to +55 °C	0 to +55 °C	0 to +55 °C
Housing protection	IP30	IP30	IP30	IP30
Housing material <sup>l)</sup>	ABS	ABS	ABS	ABS
Color	RAL 9002	RAL 9002	RAL 9002	RAL 9002

	WAC12	WAC11	WAS11	WAV61	WAT21
Operating voltage	9 – 15 V DC			9 – 15 V DC	9 – 15 V DC
Supply	via E-Bus	via audio bus	via audio bus	via E-Bus or external 12 V	via E-Bus
Current consumption (12 V DC)	min. 6 mA max. 38 mA	min. 0 mA max. 7 mA	min. 0 mA max. 3 mA	typ. 23 mA	min. 12 mA max. 107 mA
Loudspeaker	Built in	Built in			WAC11 option
Microphone	Built in	Built in	Built in		WAS11 option
Camera inputs					1 (PAL/CCIR standard resolution camera, <300 TVL, 1Vpp)
Monitor output				1 (1 Vpp)	1 (1 Vpp)
Number of on-board open coll.					1 (max. 12 V / max. 150 mA / 40 R)
Tamper	Signalization via E-Bus	Signalization via NC contact	Signalization via NC contact	Signalization via NC contact	Signalization via E-Bus
Bus connections	E-Bus Audio bus			Video bus	E-Bus Audio bus Video bus
Housing protection	IP30	IP30	IP30	IP30	IP30
Housing material <sup>l)</sup>	ABS	ABS	ABS	ABS	ABS
Color	RAL 9002	RAL 9002	RAL 9002	RAL 9002	RAL 9002
Operating temperature <sup>1)</sup>	-10 to +55 °C	-10 to +55 °C	-10 to +55 °C	-10 to +55 °C	-10 to +55 °C

	WMA11	WMV12	SMV11	SML51	SML61
Operating voltage	10.5 – 15 V DC	10.5 – 15 V DC	10.5 – 15 V DC	9 – 15 V DC	9 – 15 V DC
Supply	via main circuit board	via main circuit board	via main circuit board	via main circuit board	via main circuit board
Current consumption (12 V DC)	min. 10 mA max. 100 mA	min. 8 mA max. 160 mA	min. 3 mA max. 25 mA	min. 4 mA max. 82 mA	min. 4 mA max. 82 mA
Memory		Storage of up to 6 compressed pictures (max. 18kB per picture, totally 48kB)	Storage of 6 alarm messages (each max. 3.2 sec., 4 help and 1 identification message (each max. 6.4 sec.), 6sec. audio recording after alarm trigger		
Bus	Audio-Bus max. length 200 m. Use of separate cable for larger distances. Cable type IYSTY 2 x 2 x Ø 0,6 mm. (min).	Video-bus max length 500 m. Cable type IYSTY 2 x 2 x Ø 0,6 mm. (min).			
Operating temperature <sup>1)</sup>	0 to +40 °C	0 to +40 °C	0 to +40 °C	0 to +40 °C	0 to +40 °C

## Technical specifications

	<b>SMN42</b>	<b>SMN43</b>
Operating voltage	10.5 – 15 V DC	10.5 – 15 V DC
Supply	via main circuit board (12 V DC terminals in SI12x)	via main circuit board (12 V DC terminals in SI12x)
Current consumption (12 V DC)	typical: 180 mA (at 12 V)	typical: 220 mA / 300 mA (at 12 V, without or with SMS or GPRS transmission).
Number of on-board relays	3 single-pole, 24 V / 2 A (switching power)	3 single-pole, 24 V / 2 A (switching power)
Compatible with	SI4xx/SI34x (>= Rel F9-22), SI22x/SI12x (>= Rel A8), SMN36 (replacement)	SI4xx/SI34x (>= Rel F9-22), SI22x/SI12x (>= Rel A8)
Communication protocol	Events: ASTM UDP/IP (Contact ID, CESA) or SUPELPRO TCP/IP (Contact ID, CESA)	Events: ASTM UDP/IP (Contact ID, CESA) or SUPELPRO TCP/IP (Contact ID, CESA), SMS
Interfaces	1 IP (RJ45, 10-BaseT) 1 x RS232 (J3/J6) 1 x RS232 (J1)	1 IP (RJ45, 10-BaseT) 1 x RS232 (J3/J6) 1 x RS232 (J1)
Configuration	Network: manual Module: via embedded Web Server or Sylcom (only Si4xx)	Network: manual Module: via embedded Web Server or Sylcom (only Si4xx)
Encryption	SUPELPRO for alarm transmission or serial interface	SUPELPRO for alarm transmission or serial interface
Communication backup	Physical: Ethernet / PSTN (option), Logical: 2 <sup>nd</sup> IP destination alarm receiver	Physical: Ethernet / GSM (GPRS) / PSTN (option), Logical: 2 <sup>nd</sup> IP destination alarm receiver
GSM		Module: Siemens MC55 (Tri band 900/1800/1900 MHz), Capability: GPRS and SMS
Transmitter/receiver antenna		GSM antenna max length: 5 m / SMA connector
Operating temperature <sup>1)</sup>	0 to +55 °C	0 to +55 °C

<sup>1)</sup> Operating temperature at 93 % relative humidity, no dew

### Technical note:

A) Use of external power supply is recommended behind the output of SAR11/SMR11 (otherwise output current is limited to 400 mA).

## Ordering information

Type	Item No.	Designation	Dimensions (WxHxD in mm)	Weight
SI220	See note <sup>1)</sup>	Sintony Control Unit	303 x 405 x 88	5.500 kg
SAK9L1	S24243-F3264-A1	Universal Annunciation Module with Function Keys	112 x 92 x 28	0.200 kg
SAK9S1	S24243-F3265-A1	Universal Key Switch Module	112 x 92 x 38	0.290 kg
SAK84	S24243-F3266-A4	LCD Keypad with Card Reader and Audio	112 x 185 x 28	0.380 kg
SAK41	BPZ:8006590001	LCD Keypad with Flap	110 x 166 x 30	0.250 kg
SAK51	BPZ:8006630001	LCD Keypad	170 x 110 x 30	0.220 kg
SAK52	BPZ:8006930001	LCD Keypad with Audio	170 x 110 x 30	0.250 kg
SAK53	BPZ:8006940001	LCD Keypad with Flap and Large Display	170 x 110 x 30	0.270 kg
SAT12	BPZ:8006150001	Transponder (4 Inputs / 2 Outputs)	135 x 86 x 27	0.120 kg
SMT12	BPZ:8006160001	Transponder Board (4 Inputs / 2 Outputs)	90 x 52 x 20	0.050 kg
SMT44	BPZ:8006730001	Output Transponder Board (8 Outputs)	156 x 55 x 20	0.090 kg
SAR11	BPZ:8000990001	E-Bus Isolator / Repeater	135 x 86 x 27	0.130 kg
SMR11	BPZ:8001090001	E-Bus Isolator / Repeater Board	90 x 52 x 20	0.050 kg
SAP14	BPZ:8003160001	External Power Supply 12 V DC / 1.3 A (without battery)	303 x 405 x 88	5.400 kg
SAP20	BPZ:8006880001	External Power Supply 12 V DC / 2.3 A (without battery)	365 x 505 x 133	8.400 kg
WMA11	BPZ:8000310001	Audio Board	113 x 60 x 26	0.060 kg
WMV12	BPZ:800040010	Video Board	130 x 118 x 24	0.130 kg
WAC12	BPZ:8007720001	Loudspeaker/Microphone (addressable)	105 x 145 x 70	0.240 kg
WAC11	BPZ:8000110001	Loudspeaker/Microphone	105 x 145 x 70	0.240 kg
WAS11	BPZ:8005230001	Microphone	77 x 77 x 35	0.070 kg
WAV61	BPZ:8003430001	Monitor Interface for Video-Bus	135 x 86 x 27	0.120 kg
WAT21	BPZ:8002150001	Video/Audio Transponder	135 x 86 x 27	0.140 kg
SMV11	BPZ:8000440001	Voice Board	106 x 60 x 26	0.060 kg
SML51TBR	BPZ:8003480001	Dialer Board PSTN	140 x 50 x 24	0.070 kg
SML61	BPZ:8003970001	Dialer Board ISDN	140 x 65 x 29	0.070 kg
SMN42	S24243-A3203-A1	IP Interface Board	130 x 120 x 25	0.140 kg
SMN43	S24243-A3203-A2	IP / GSM(GPRS) Interface Board	130 x 120 x 27	0.150 kg
SML21	BPZ:8000530001	Line Supervision Board PSTN	50 x 31 x 20	0.020 kg
SMX13	BPZ:8009180001	Relay Board	60 x 38 x 20	0.030 kg
SMX26	BPZ:8000330001	Low Battery Protection Board	-	0.030 kg
SMZ91	BPZ:8005940001	Back Tamper Kit for SI200	-	0.050 kg
SAH24	BPZ:8004370001	Plastic Housing (Double Size)	215 x 130 x 35	0.180 kg
SAQ11	BPZ:8001960001	PC-Programming and Printer Cable	-	0.090 kg

Note:

<sup>1)</sup> Item No. is depending on country version. Not all described features in this datasheet are supported by every country version.

Issued by  
Siemens Building Technologies  
Fire & Security Products GmbH & Co. oHG  
D-76181 Karlsruhe

[www.buildingtechnologies.siemens.com](http://www.buildingtechnologies.siemens.com)

© 2009 Copyright by  
Siemens Building Technologies AG  
Data and design subject to change without notice. Supply subject to  
availability.

Printed in the Federal Republic of Germany  
on environment-friendly chlorine-free paper.

---

Dokument Nr. A6V10061894  
Ausgabe 23.03.2009