SIEMENS

Advanced Central Controller

AC5102

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Features

- Central controller for SiPass integrated access control systems
- Support for 500,000 cardholders
- Support for up to 96 doors
- Fully supported in SiPass integrated MP2.6 or higher, backwards compatible with MP2.4 and MP2.5
- Up to six field level network (FLN) channels (RS485) for local device connection
- Up to 16 local devices can be connected to each FLN. See FLN Device Load Limitations [→ 6]
- Building level network (BLN) port for communication with the host system via Ethernet
- FLN1-3 can also be changed to RS232 communication port for Modem or Elevator Integration.

The AC5102 also has a USB diagnostic port that provides a direct connection to its micro-processor to facilitate the download of operating instructions (firmware). Firmware updates can be made without having to visit the controller cabinets. Communication to the host system occurs via a 10/100Mb Ethernet connection. This allows communications over any WAN or LAN where devices on the network can be as-signed a unique IP address. This type of communication ensures the fastest possible transaction times between the host system and AC5102 field panels.

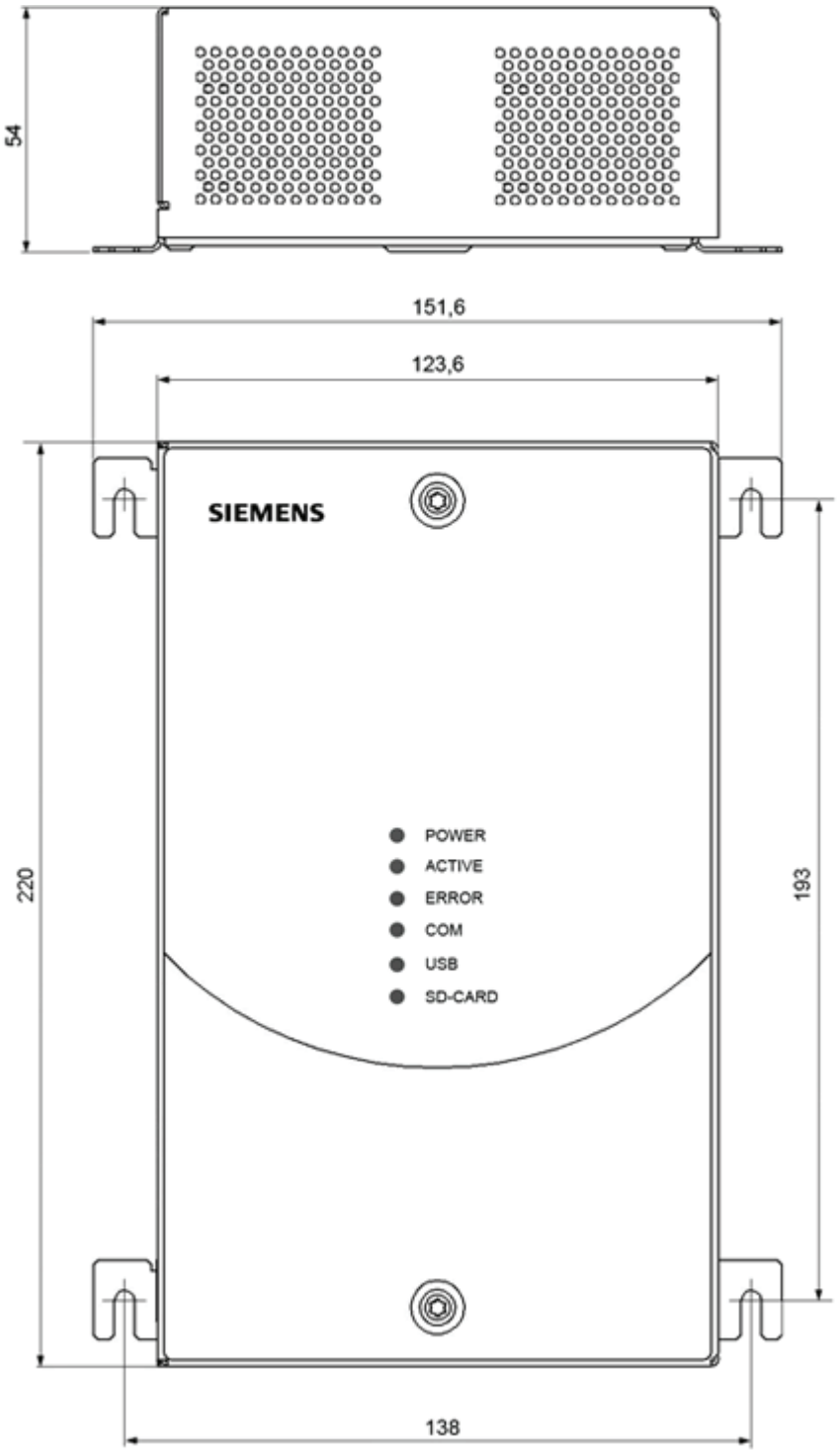
The AC5102 hosts a tamper input that can be used to detect if the cabinet in which it has been mounted has been opened. It also provides an alarm output that can operate a visual or audio alarm when security has been breached.

Technical Specifications

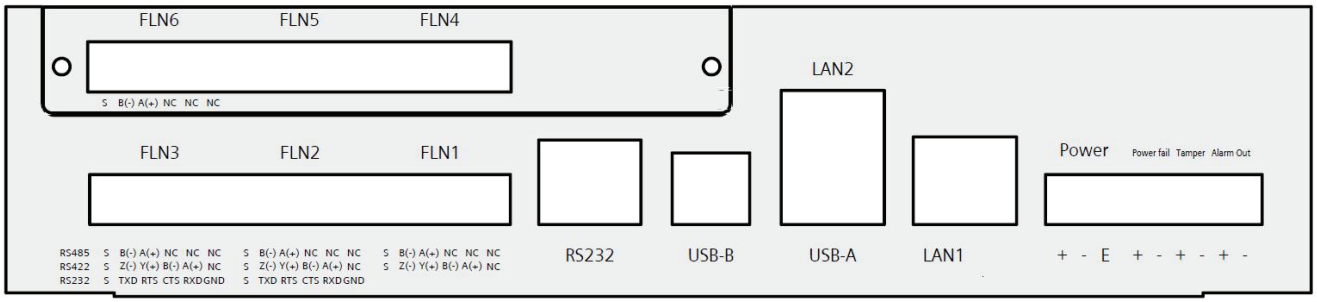
Additional components	ACK5110 cable for modem connection
Communication interfaces	● 6 x Field level network (FLN): – FLN 1: RS232 (modem port) or RS422 / RS485 – FLN 2 & 3: RS232 / RS422 / RS485 – FLN 4,5,6: RS485 only (expansion module) ● 1 x RS232 RJ12 (RxD, TxD, GND) ● 2 x LAN: RJ45 (10/100 MB Ethernet) ● 1 x USB-A ● 1 x USB-B
Operating voltage	12-30 VDC
Power consumption	Max. 10 W (fully loaded)
Alarm inputs	1 x Tamper input, 1 x Power fail input
Alarm output	1 x Alarm output (optical relay, max. 12 V, 100 mA)
Door capacity	96
Card capacity	500,000
Indicators	Power, Active, Error, COM, USB, SD-Card, 4 x Ethernet
LCD Display	None
Keypad	None
Tamper switch	Yes (Internal)
RTC battery	3.0 V, type CR2032
Microprocessor	AT91SAM9G20 RISC Processor Based on ARM v5TEJ Architecture
Main memory	128 MB
Flash memory	256 MB; Firmware is field-updatable
Operating temperature	0 to +50 °C
Environment	Indoor use only
Housing	Steel
Colour	Grey and blue
Storage temperature	-30 to +65 °C (-22 to 149 °F)
Humidity	5 – 93% (non condensing)
Dimensions (W x H x D)	124 x 220 x 54 mm
Approval	CE, UL294, C-Tick, FCC

Dimensions

Note that the unit is recommended to be mounted in upright position to achieve the best ventilation.



Interfaces



The following table provides a brief description of each port.

Port Name	Brief Description
FLN 1	Local RS485/RS422 communications for connection of up to 16 local devices. **NOTE: FLN1 and RJ45 RS232 ports are shared. Only one port can be connected at any given time.**
FLN 2-3	Local RS485/RS422/RS232 communications for connection of up to 16 local devices
FLN 4-6	Local RS485 communications for connection of up to 16 local devices
RS232	Modem port: RJ-45 (RS232) port for dialup communications with the host system
USB-B	USB port to connect to a PC for initial network configuration and for diagnostic purposes
USB-A	USB port for connection of USB devices, like a flash key
LAN 1-2	Ethernet ports for communication with the host system via LAN
Power	Connection for a 12-30 V DC power source.
Power fail	Input for the connection of a power fail signal used to monitor the status of the external power supply
Tamper	Input for the connection of a tamper switch, used to monitor the status of the cabinet door
Alarm out	Optical relay (max. 12 V, 100 mA) used to connect an alarm output device such as a siren / buzzer / strobe light.

FLN Device Load Limitations

Each device produces a certain load on the FLN. The following table outlines the equivalent load value for each FLN device.

Device	Configuration Units
ADS52x0 (SRI)	1 load
ADD51x0 (DRI)	2 loads
AFI5100 (IPM)	4 loads
AFO5100 (OPM)	4 loads (2 when used in one lift control)
ADE5300 (ERI)	8 loads
AFO5200 (8IO)	2 loads

The following table outlines the maximum value of configuration loads that can be connected to each FLN.

FLN Channel	Maximum Configuration Unit Value
FLN 1	16 loads
FLN 2	16 loads
FLN 3	16 loads
FLN 4	16 loads
FLN 5	16 loads
FLN 6	16 loads

Example of a Load calculation: ADE5300 + AFI5100 + 2 x ADD5100 = 16 loads

Details for Ordering

Type	Part no.	Designation	Weight
AC5102	S54507-C22-A1	Advanced central controller (ACC)	990 g
Accessories, not included in scope of delivery!			
ACK5110	6FL7820-8FB11	SiPass integrated modem cable	200 g

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