

# SIEMENS



## Access Control

### AC5200

### Quick Start Manual

Siemens AB

Security Products

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# 1 Introduction

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The AC5200 (ACC-Lite) is a smaller alternative to the ACC (Advanced Central Controller) used in SiPass integrated. The AC5200 is based on the Entro SR34i/SR35i controller and exists in two variations:

- AC5200: 8 Door controller with preloaded ACC Firmware.
- ACC-X – An Entro Controller upgraded with ACC Firmware. The X represents the number of doors supported.

The AC5200 can be used with either ACC or Entro devices. However ACC-X controllers can only be used with Entro devices, and are for migration sites.

This Quick Start Manual outlines how to install and configure an AC5200 controller to work with SiPass integrated.

## 1.1 Installation Overview

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The following is a list of items required to complete this installation:

- AC5200 or Entro SR34i/SR35i Controller
- 12-24V power source
- Ethernet cable
- ACC FLN or Entro Devices + wiring

Optional items:

- Modem + RS232 cable

The installation should proceed in this order:

1. Connect power to the AC5200.
2. Connect the FLN bus.
3. Connect the Ethernet.
4. Configure the network settings.
5. Create the AC5200 in SiPass integrated.

## 1.2 AC5200 Exterior

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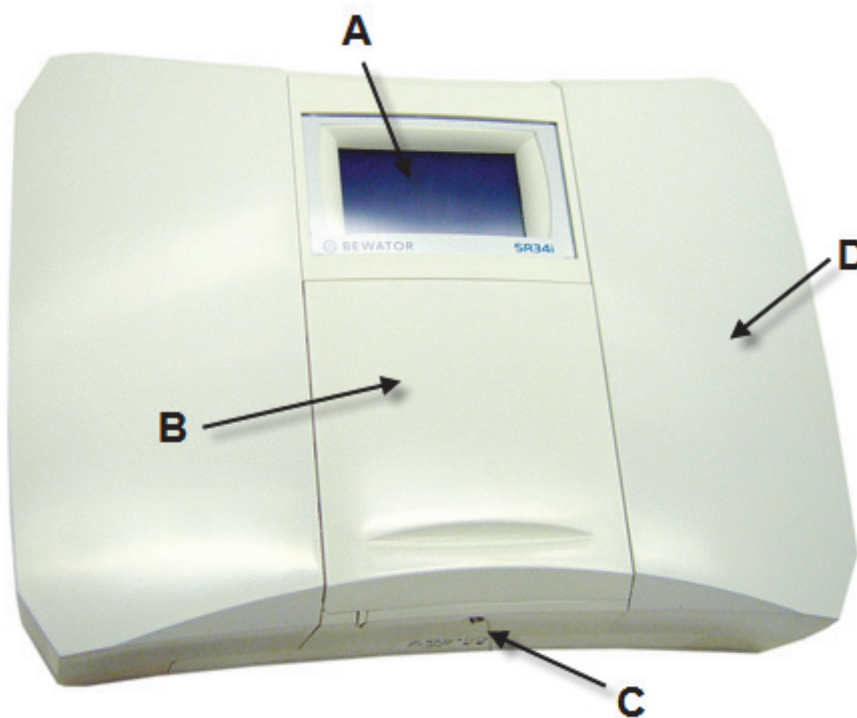


Fig. 1 AC5200 Exterior

### AC5200 Exterior Items

Item	Description
A	LCD Panel. By default this displays basic information about the controller but it can also be used to set system configuration.
B	Keypad cover. When the AC5200 is unlocked and the doors opened, this cover slides downward exposing a numeric keypad that can be used to set basic options for the AC5200.
C	Keylock. To open the AC5200 cover the correct key must be used to unlock and provide mechanical access.
D	Cover Door. The AC5200 provides two cover doors that can be used to gain access to the connectors that allow devices (eg: DC12 / D22 etc.) to be connected to an AC5200.

## 1.3 AC5200 Interior

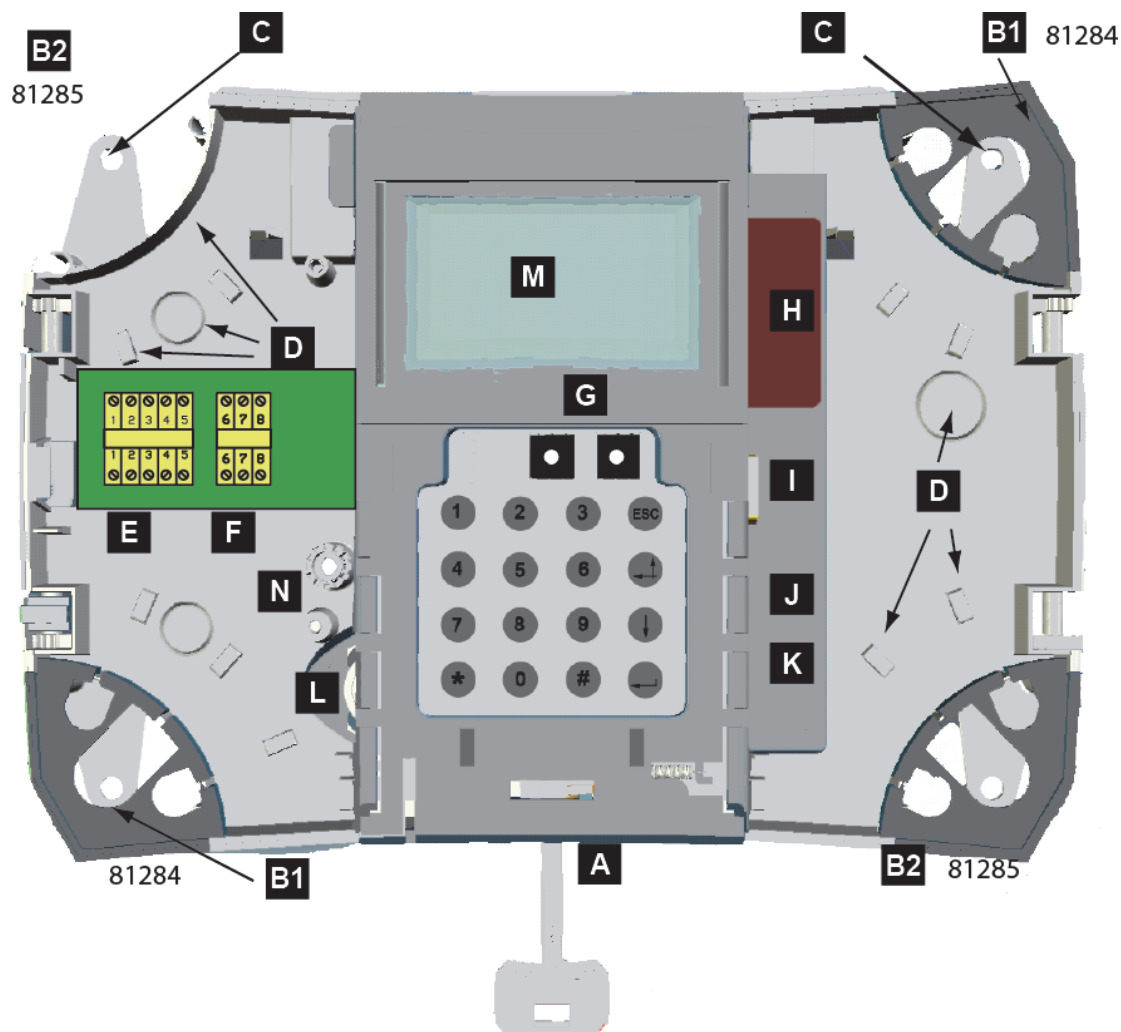


Fig. 2 AC5200 Interior Diagram

Item	Description
A	Lock for use with supplied key. The middle of the front lid must be pressed downwards before the left and right lid can be opened.
B1, B2	Corner details that can be knocked out for hiding cable entry.
C	Wall mounting screw holes. Remember to leave approximately 70mm space around the controller.
D	Cable management mounting.
E	RS485 bus connection for devices
F	Not in use
G	Not in use
H	Socket for compact flash card (only supported for Entro upgrade)
I	RS232 Modem / Diagnostics port
J	1 <sup>st</sup> RJ45 Ethernet connection
K	2 <sup>nd</sup> RJ45 Ethernet connection
L	Battery socket, type CR2032.
M	Display for showing and entering information
N	Tamper switch

# 1.4 AC5200 Mechanical

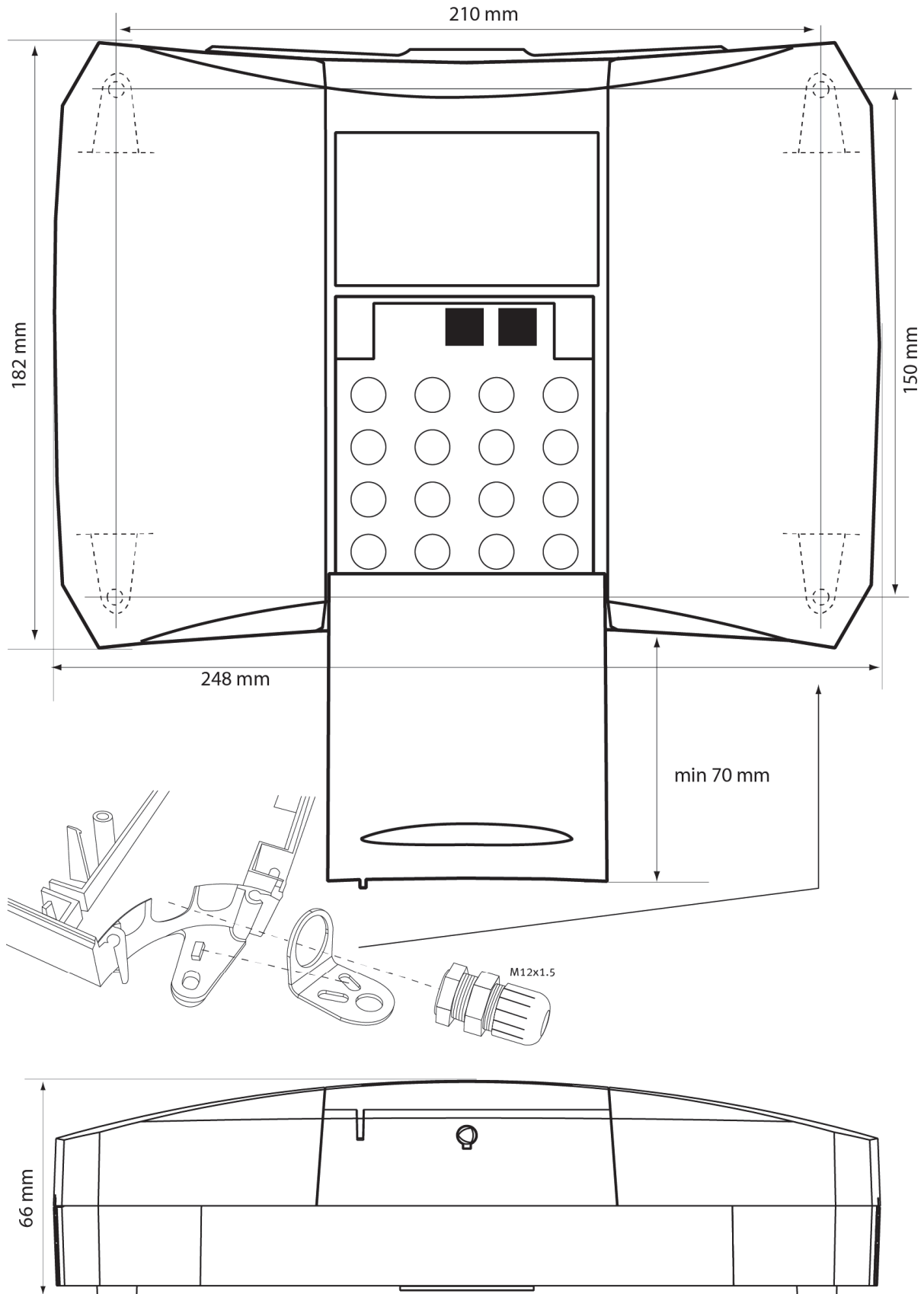


Fig. 3 AC5200 Mechanical Layout



## 2 Hardware Connection

This chapter explains how to connect up the power, communications and other things to the AC5200 hardware.

### 2.1 Basic Connection

The following section outlines the basic tasks required to get the AC5200 up and running.

#### Power Connection

The AC5200 requires a 12-24V power supply. Connect the power at terminals 1 and 2 of the AC5200.

#### Communication with devices

The AC5200 has one FLN to communicate with devices, which operates over RS485. The following table explains what devices are available:

Controller	Bus Protocol	Devices Supported
AC5200	ACC FLN	SRI (Single Reader Interface)
		DRI (Dual Reader Interface)
		ERI (Eight Reader Interface)
		8IO (Eight Input / Output Module)
		IPM (32 Input Module)
		OPM (16 Output /16 Input Module)
	Entro	DC12 (Dual Reader Interface)
		DC22 (Dual Reader Interface)
		DC800 (Dual Reader Interface)
		IOR6 (4 Input / 6 Output Module)
ACC-X	Entro	DC12 (Dual Reader Interface)
		DC22 (Dual Reader Interface)
		DC800 (Dual Reader Interface)
		IOR6 (4 Input / 6 Output Module)

- Connect your bus to **COM A** (terminal 4) and **COM B** (terminal 3).
- Connect **COM A** to **COM A** and **COM B** to **COM B** for Entro devices
- Connect **+** to **COM A** and **-** to **COM B** for ACC FLN devices

When using DRI (ADD5100) / ERI (ADE5300) / SRI (ADS5200) a 120 Ohm termination only at door control unit side is required. For DC12 / DC22 / IOR6 120 Ohm termination on both ends, door unit and AC5200 controller side, is required.

### Communication with SiPass integrated

The AC5200 communicates with SiPass integrated via TCP/IP. Connect an Ethernet cable to either of the available RJ45 Ethernet connections.

Peer to Peer communication between controllers is also done via TCP/IP.

## 2.2 Explanation of connectors

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The following table explains of each of the available connectors on the AC5200.

Terminal Number	Connector Label	Description
1	12-24V +	Positive connector for power source
2		Negative connector for power source
3	COM B	RS485 bus connection for FLN/Entro devices
4	COM A	RS485 bus connection for FLN/Entro devices
5	FRAME	Signal screen for RS485 bus connection.
6	COM B	Not in use
7	COM A	Not in use
8	FRAME	Not in use

## 2.3 Mounting the AC5200

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The following instruction explains how to mount an AC5200.

**To mount an AC5200:**

1. Remove the AC5200 from its carton and discard the packaging material.
2. Place the AC5200 against the surface to which it is to be affixed and mark the location of the mounting holes.
3. Select the appropriate drill bit according to the mounting surface / hole size and drill the holes in the locations marked (if required).
4. Fasten the AC5200 to the surface using the correct type of screws or stand-offs for the surface in the 4 locations provided.
5. Download the firmware instruction set (as described in the section titled "Firmware Download").
6. Connect the cabling to the ACC (as described in the section titled "Wiring").
7. Apply power to the ACC and test its operation. This step will require programming of the host software.

## 2.4 Battery Installation

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A battery is already installed and shipped with the AC5200.

**To activate the AC5200 battery:**

1. Open the AC5200 case
2. Remove the orange isolating plastic band to activate the battery poles.

## 3 AC5200 Configuration

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This chapter outlines the configuration steps required to connect an AC5200 with SiPass integrated.

### 3.1 Upgrading an Entro SR34i or SR35i

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This section only applies if you are upgrading Entro controllers in the field to ACC-X units.

**Requirements:**

- SAN-Disk Compact Flash card.
- ACC-X Firmware upgrade file.

**To upgrade an Entro Controller to an ACC-X:**

1. Determine the version of Entro firmware currently running. This can be found on the Status screen of the Entro Software running on the PC
  - It can also be found on the LCD menu interface of the SR34i/SR35i.
2. Select the appropriate upgrade file as specified in the table below. This file can be found on the CD in the Firmware\ACC\ACC-X folder.
3. Copy this file to the Compact Flash card.

Entro Firmware Version	Renamed ACC-X upgrade file
Earlier versions	patch.dat
5.2	patch_SR34i.dat
5.25	SR_firmware.hex (upgrade path to 5.3)
5.3	SR_firmware.hex (allows > 1Meg files)

4. Determine the IP address of the SiPass integrated Server PC, and record it.
5. Use the LCD menu on the SR34i/SR35i to determine the current IP address, gateway, subnet mask and door count, and make a note of these values (write it down on paper or otherwise record the values as they will be needed later).
6. Carefully Insert the Compact Flash card into the SR34i/SR35i controller unit.
7. Answer yes when the LCD menu asks "Upgrade to new firmware?".
8. Wait for the LCD menu to confirm that it has completed the upgrade (this usually takes several minutes) and then remove the Compact Flash card.
9. Wait a moment for the ACC-X firmware to get running.
10. Make a note of the serial number displayed.
11. Use the LCD menu to re-enter the IP address, gateway, subnet mask and Server IP address.
12. Repeat steps 4-11 for each controller

13. For each SR34i/SR35i upgraded, in the SiPass integrated bring up the Component dialog and from the "ACC Controllers" item select "New Unit".
14. Select the Controller type as ACC-4, 8, 16, or 32, depending on the door count.
15. Enter in the serial number saved from ACC-X startup screen and save it.

The ACC-X should connect to SiPass integrated shortly.

Make a note of the serial number and door count, and contact Logistics to purchase an ACC-X Upgrade licence to make the upgrade permanent

## 3.2 Configuring Network Settings

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Once your AC5200 is powered up and connected to the network, you will need to configure the network settings and also note down the serial number.

### To configure an AC5200:

1. Open the AC5200 case if it is not already open
2. Press **2** to modify Network Settings
3. Press **2** to Change IP Settings
4. Press **1** to set the IP Address
  - Enter the new IP address with the keypad
  - For numbers that are less than three digits add 0s in front, for example 001 or 016
  - Press any key except 1 to continue
5. Press **2** to set the Subnet Mask
  - Enter the subnet mask with the keypad
  - Press any key except 1 to continue
6. Press **3** to set the Gateway Address
  - Enter the gateway address with the keypad.
  - Press any key except 1 to continue
7. Press **4** to set the Host Address. This is the IP address of your SiPass integrated server PC
  - Enter the host address with the keypad.
8. Press **5** to set the Port Address. This is the port the AC5200 uses to communicate with SiPass integrated. By default it is 4343
  - Enter the port address with the keypad.
9. Press **1** to Apply Changes and Restart your AC5200

The AC5200 will restart with the entered network settings. You should see an Audit Trail message in SiPass integrated indicating that the AC5200 is trying to connect.

## 3.3 Firmware Download

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Firmware downloads are done from the SiPass integrated software. This process is the same as downloading firmware for an ACC.

**Before you begin:**

- The AC5200 must be created in the SiPass integrated database and be communicating

**To download firmware to the AC5200:**

1. Select **System > Initialize**.
2. Double click your AC5200 from the list of available units.
3. Click **Image Download**.
4. Click **Browse** to select the firmware image to download.
5. Click **Download**. The selected firmware will be downloaded and the AC5200 will reset once it has been upgraded.
6. Click **Close** to close the Initialize System dialog.

## 3.4 License Download

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License downloads for the ACC-X are done from the SiPass integrated software.

**Before you begin:**

- The ACC-X must be created in the SiPass integrated database and be communicating

**To download a license to the AC5200:**

1. Select **System > Initialize**.
2. Double click your ACC-X from the list of available units.
3. Click **License Download**.
4. Click **Browse** to select the firmware image to download.
5. Click **Download**. The selected license will be downloaded to the AC5200.
6. Click **Close** to close the Initialize System dialog.

## 4 Menu Navigation

This chapter explains the various menu navigation options.

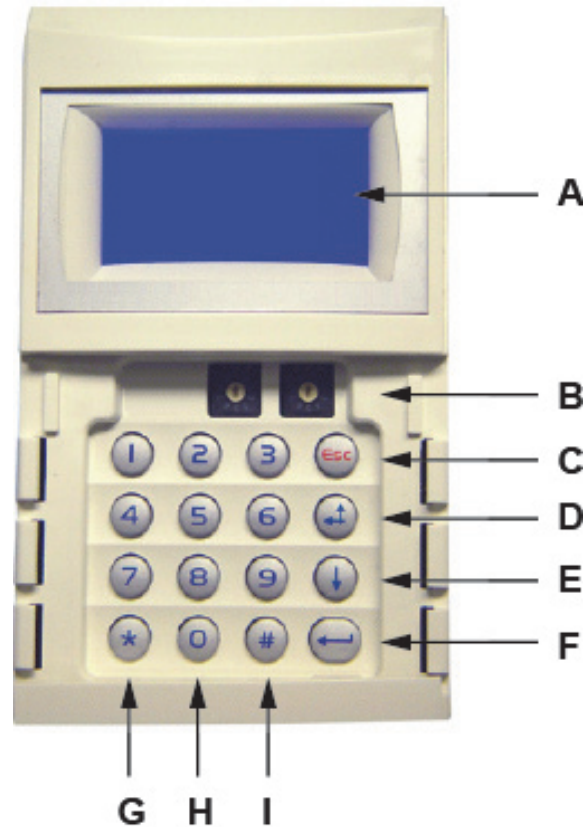


Fig. 4 AC5200 Keypad

Item	Description
A	Display for Navigation and Messages
B	Address Setting
C	Escape Key (goes back to the previous menu)
D	Backspace while entering (letters and digits)
E	Confirmation button (some menus)
F	Enter Key
G	No function
H	Number keys 0-9
I	No function





## Menu Navigation Options

Menu Structure		Keys	Result
1) System Information	1) General Information		1-1 Returns the serial number, model and hardware type.
	2) Supply Voltage		1-2 Returns the power supply and battery voltage. Note the battery voltage does not automatically update
	3) Software Versions		1-3 Returns the Application version information
2) Network Settings	1) View IP Settings		2-1 Returns the IP settings
	2) Change IP Settings	1) IP Address	2-2-1 IP address is set
		2) Subnet Mask	2-2-2 Subnet Mask is set
		3) Gateway Address	2-2-3 Gateway Address is set
		4) Host Address	2-2-4 Host Address is set
3) Compact Flash	3) Telnet settings	5) Port Address	2-2-5 Port Address is set
	4) Reset to apply changes	1) To Disable / To Enable 1) Reset and apply changes	2-3-1 Toggles telnet access Enabled Disabled 2-4-1 Resets the AC5200 and applies all network changes.
	1) Entro Firmware / Upgrade AC5200 Firmware		3-1 Firmware upgrade will commence and a status will be displayed on the bottom line.

## 5 Keyword index

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