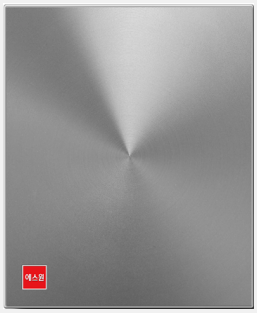
S-1 Access Controller

(CNT10003)



CNT10003 is a controller which receives information from various card reader interfaces (LCD/LED/Fingerprint)and sends information back to the Access Control Server.

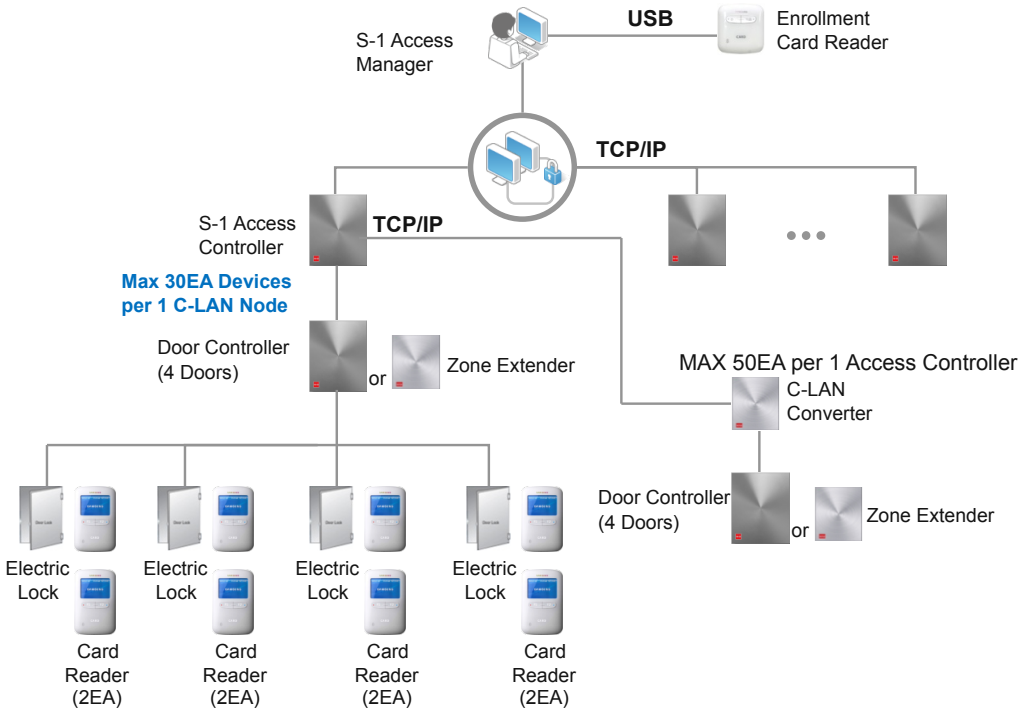
CNT10003 compares the information to an access control list, then control the door interfaces and sends the information to Access Server which is installed Access Management SW.

(S-1 Access Manager) If there is a match between the information and access control list, the door will be opened but if not, the door will remain locked.

. The security encryption type is either SEED or AES between access server and the controller.

Features & Functionality

- Provided security access, anti-passback, duress mode, and Sequential control
- Able to control 128 door interfaces per 1 Access Controller
- Smartphone with WiFi access is available for the system set up and inquiry

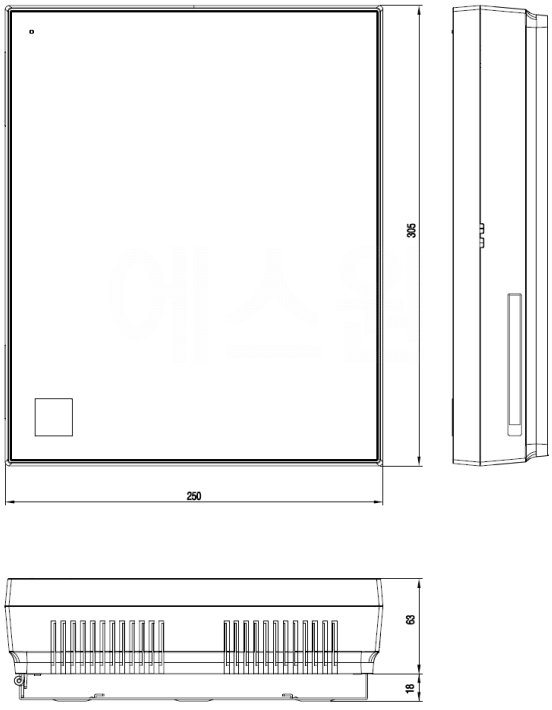


Specifications

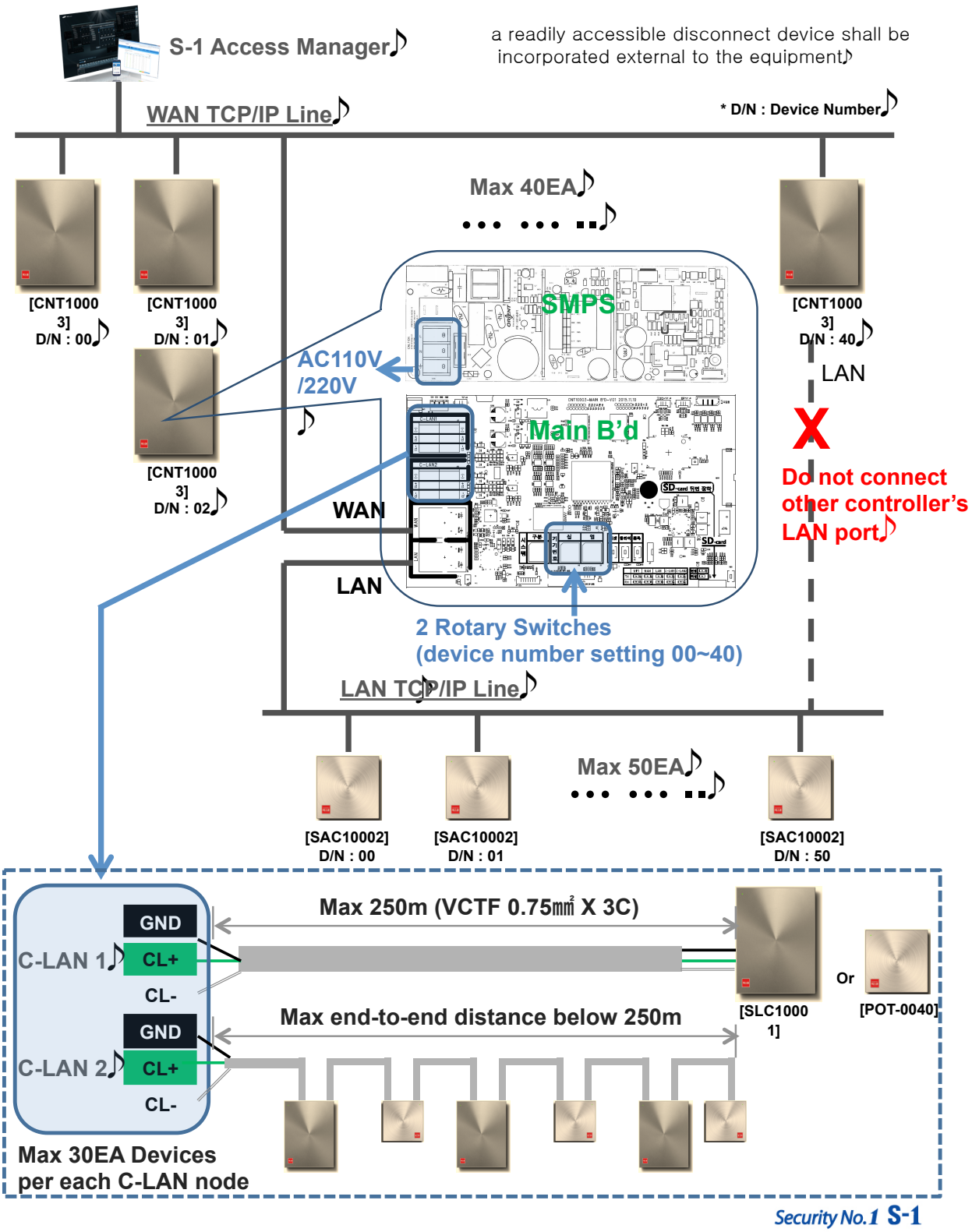
CPU♪		Cortex-A9 Series♪
Memory♪		4GB eMMC Flash 1GB SDRAM 4GB SD Card♪
Template Capacity♪		200,000 cards♪
Log Capacity ♪		200,000 events♪
Input/ Output♪		* TCP/IP - 2 Port (WAN, LAN) S-1's C-LAN - 2Port
Max. Card Reader♪		256EA Max (SLC-10001 Up to 32 downstream devices)♪
Power Module♪	Output Voltage♪	DC 14.0V ± 0.5V (Inner voltage)
	Output Current	Max. 2.7A (Inner max work current)♪
	Ripple & Noise	Max. 150mV♪
Network Interface (with Controller or Server)♪		TCP/IP (10/100Mbps), SEED or AES encryption
Network Interface (with other Devices)♪		TCP/IP (10/100Mbps), SEED or AES encryption C-LAN (Max. 50kbps)

Configuration Port♪	2.4GHz Wi-Fi USB2.0 ♪
Operating Voltage♪	AC 100 ~ 240V (50Hz ~ 60Hz)♪
Operating Temperature♪	-10℃ ~ +45℃♪
Power Consumption♪	Max 0.8A (AC 220V) Max 2.5A (AC 110V)♪
Size (WxHxD)♪	250×305×62.5 [mm]♪
Weight♪	2.26Kg (Including Battery) * Bracket : 0.74Kg♪

▷ **Dimension**

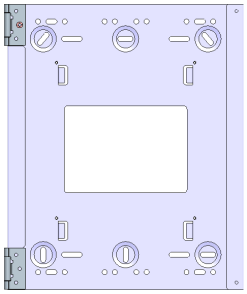


Installation



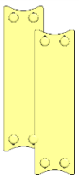
Package contents

① Controller

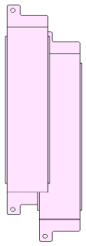


② Bracket

③ Screw



④ Bracket Connector



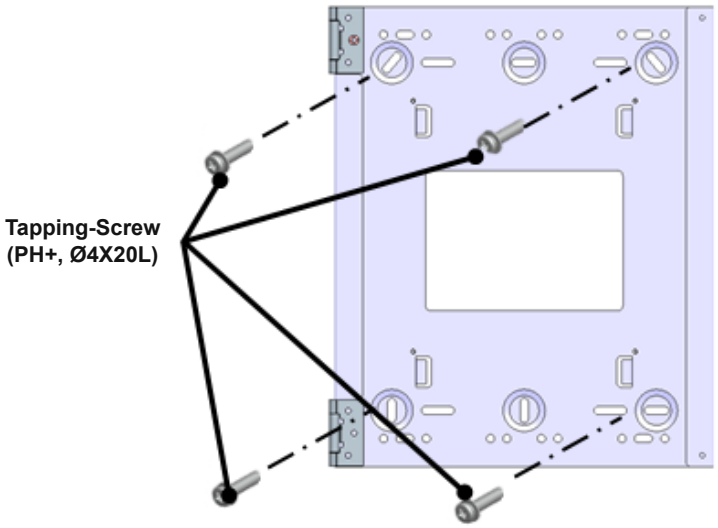
⑤ Bracket Cable

⑥ Battery

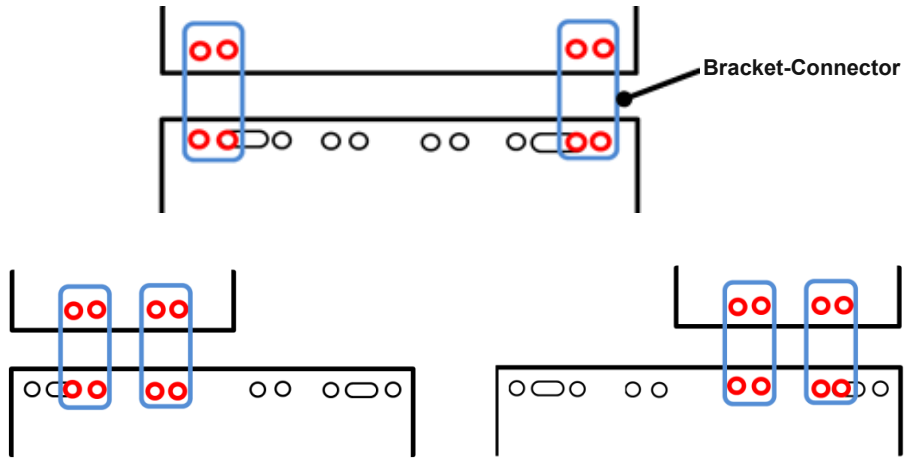
No♪	Name♪	Description♪
1♪	Controller♪	ABS (AF342 / LG Chem)♪
2♪	Bracket♪	EGI♪
3♪	Screw♪	M4-Machine Screw 4EA (Controller - Bracket)♪
		Ø4-Tapping Screw 4EA (Bracket - Wall)
4♪	Bracket-Connector♪	2EA (Use to align Devices) - ABS (VH0800, Samsung SDI)♪
5♪	Bracket-Cable	2EA (Use to arrange Wires) - GI
6♪	Battery	
7♪	Box	

Installing Guide

1. Installing the Bracket - Wall

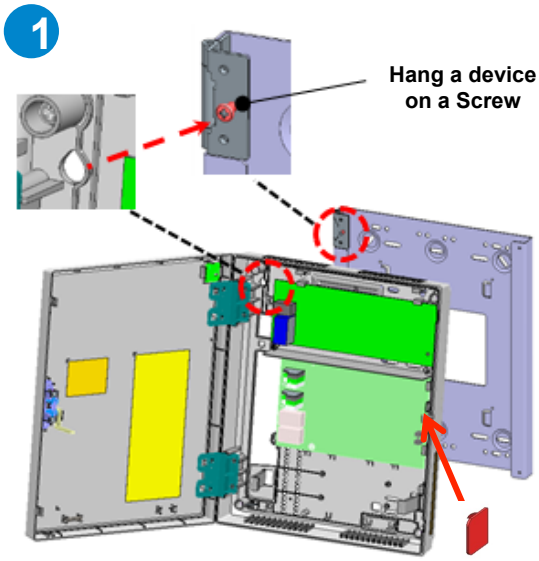


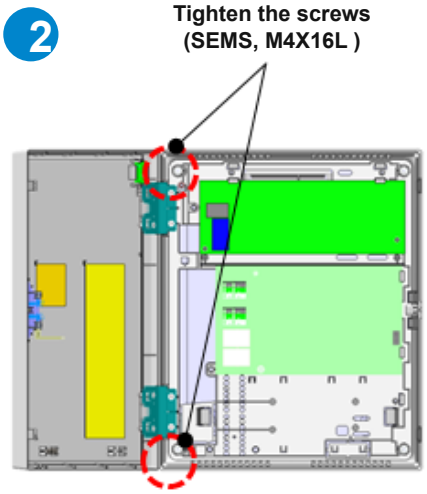
※ Installing the Multi device



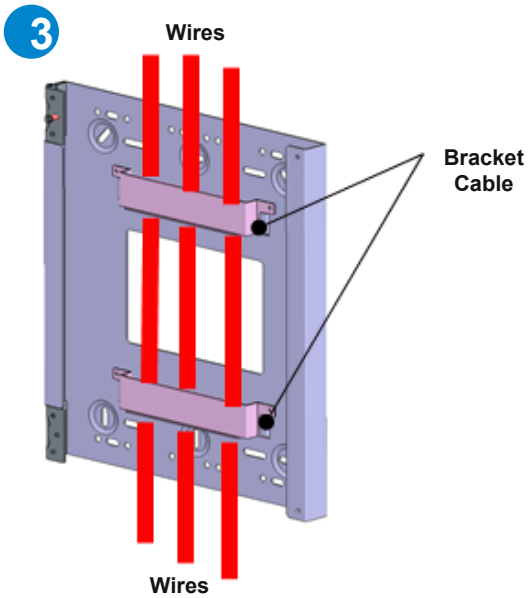
Installing Guide

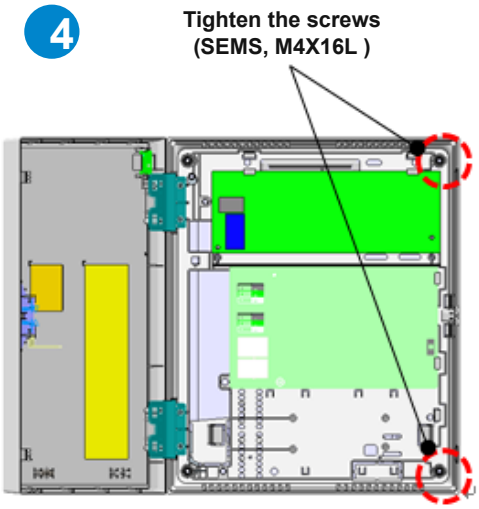
2. Installing the Device - Bracket



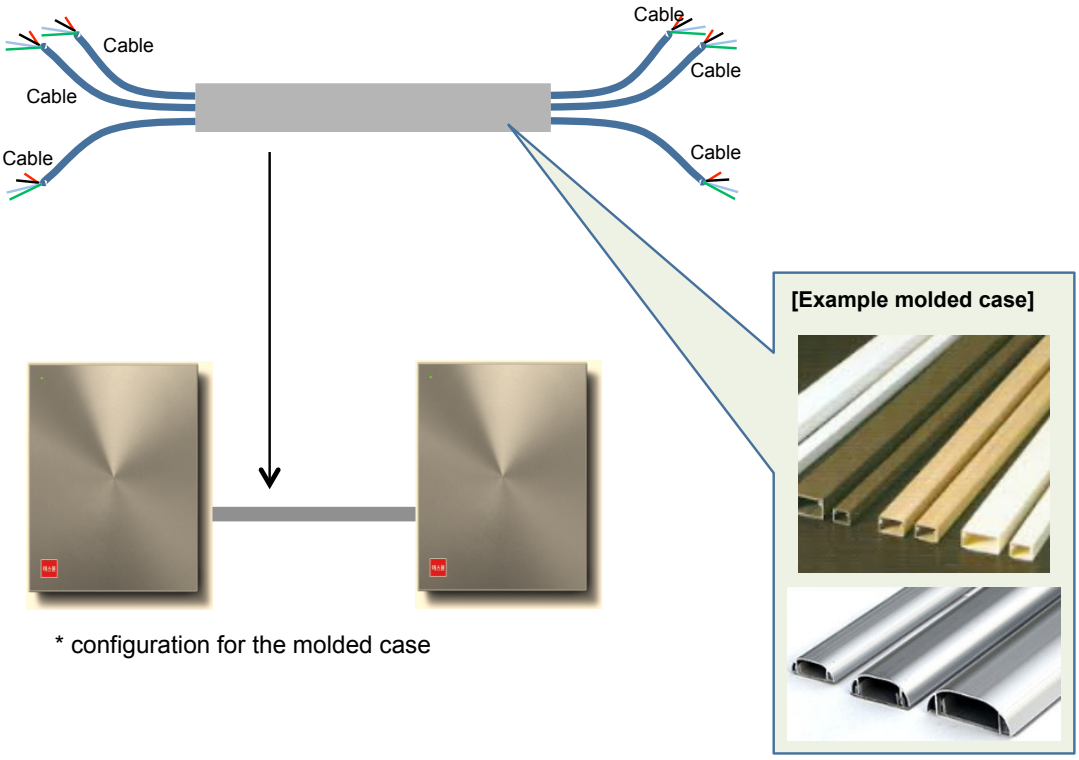


Insert the SECOM key to unlock the cover





3 Arranging cables



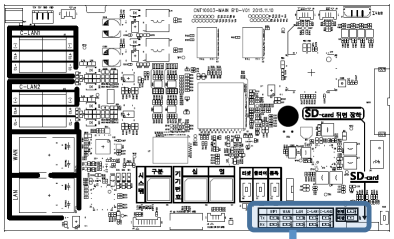
* configuration for the molded case

※ Cable specifications

No.	specifications	AWG	
1	Power	18 AWG	
2	Input/Output, Door	20 AWG	
3	Reader, C-LAN Communication	24 AWG	
4	LAN, Ethernet	5e Cat	

※ Warning : Please turn off power supply before installing, ch ecking and repairing

LED Specifications



	WIFI	WAN	LAN	CLAN1	CLAN2
TX	■	■	■	■	■
RX	■	■	■	■	■

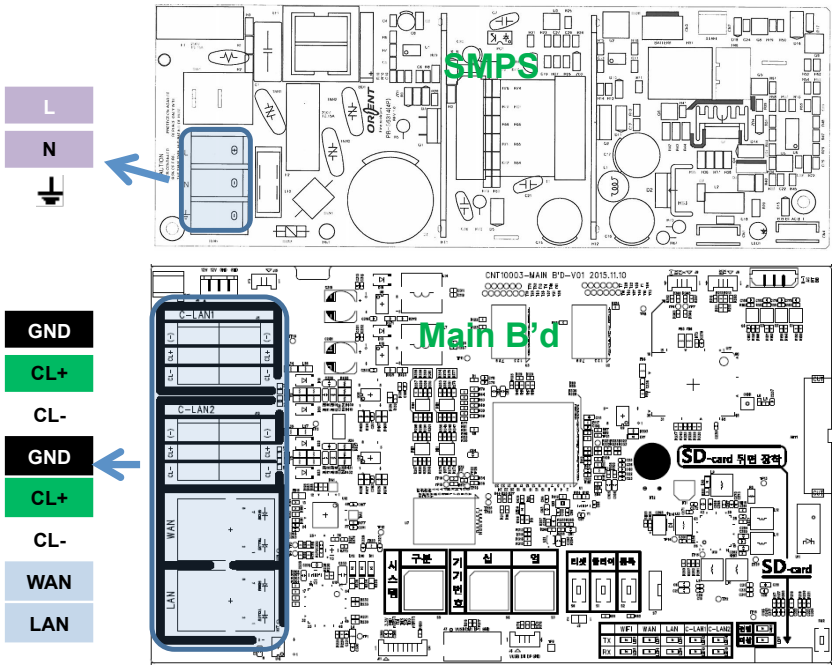
Power LED

전원	■
이상	■

Abnormality LED

Designation	Color	Quantity	Location	Display Conditions	
Power LED	Green	1	Inside	Light On	Normal devices
				Flickering	WIFI AP ON
				Light Off	Abnormality devices
Abnormality LED	Red♪	1♪	Inside♪	Light On	Abnormality devices
				Flickering	Low voltage
				Light Off	Normal devices
WIFI LED	Red Green	1 1♪	Inside♪	Light On	Communication connection
				Flickering	Keep in communication
				Light Off	Smartphone can not access the communi cation status
WAN	Red Green	1 1♪	Inside♪	Light On	Additional devices communication conne ction
				Flickering	Keep in communication
				Light Off	Additional devices can not access the co mmunication status
LAN	Red Green	1 1♪	Inside♪	Light On	Additional devices communication conne ction
				Flickering	Keep in communication
				Light Off	Additional devices can not access the co mmunication status
C-LAN 1	Red Green	1 1♪	Inside♪	Light On	Additional devices communication conne ction
				Flickering	Keep in communication
				Light Off	Additional devices can not access the co mmunication status
C-LAN 2	Red Green	1 1♪	Inside♪	Light On	Additional devices communication conne ction
				Flickering	Keep in communication
				Light Off	Additional devices can not access the co mmunication status

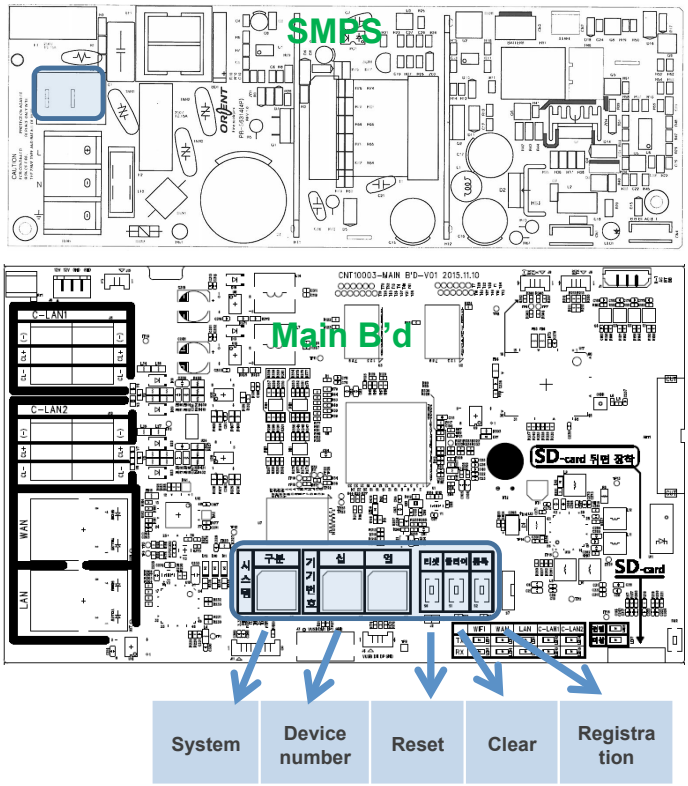
Terminal Specifications



Terminal Name	Specifications	Remarks
L	AC input	AC 100V ~ 240V Input
N	AC input	
⏚	FG ground	Earth ground connection
(-)	S-1,s C-LAN1 communication terminal♪	'Door Controller(4-Doors)'. 'Zone Extender' S-1's C-LAN communication devices connected
CL +		
CL -		
(-)	S-1,s C-LAN2 communication terminal♪	
CL +		
CL -		
WAN	LAN communication connector (upper layer)♪	RJ-45 jack
LAN	LAN communication connector (lower layer)♪	- RJ-45 jack - 'C-LAN Converter' communication devices connected

Switch Specifications

Power ON / OFF



Name	category	Quantity	Contents	Location
Device number	Rotary Switch	2	Rotary Number: 1-99	Inside
System	Rotary Switch	1	System Classification Setup	
Clear	Tact Switch	1	Clear registration information	
Reset	Tact Switch	1	Machine Device reset	
Registration	Tact Switch	1	Machine Device registration	
Power ON / OFF	Lock switch♪	1♪	Machine Device Power Off	

LAN(or WAN) Ethernet Specifications

Max wire length♪	100m♪
Cable♪	UTP Cable or STP Cable♪
Terminal♪	RJ-45 Socket♪
Communication target♪	S-1 access controller C-Lan converter S-1 access manager♪
Communication speed♪	Maximum 100Mbps
Network interface (with Controller or Server)♪	TCP/IP (10/100Mbps), SEED or AES encryption
Network Interface (with other Devices)♪	TCP/IP (10/100Mbps), SEED encryption

S-1's C-LAN Specifications

Cab(Cyclic Redundancy Check)e	VCTF 3C
Terminal	(-), CL+, CL-
Maximum wire length	1:1, 500m
Communication target	S-1 access controller Door controller for 4 doors C-Lan converter
Communication Line	S-1' C-LAN(controller area network)
Communication Speed	50kbps
Communication Type	2-wire multiplex communication
Synchronous method	Synchronous(ISO 11898)
Communication sequence	ISO11898
Character set	8 bit data
Transfer order	Start of frame
Error check	CRC

Wi Fi Specifications

Frequency Band	2.4 GHz (20MHz Bandwidth)
Channel	Ch.1 ~ Ch.13
Mode	IEEE 802.11b/g/n
PHY Data Rate	Max 72.2 Mbps
Carrier mode	OFDM & DSSS
Access mode	Client & Soft AP
Maximum output power	+17 dBm @11Mbps
	+15 dBm @54Mbps
Sensitivity level	-87 dBm @11Mbps
	-73 dBm @54Mbps
Interface	SDIO Interface
Antenna	Carrier pattern Antenna
DC operating voltage	+ 3.3V
Max. Current	300 mA
External Ref. clock	26 MHz ± 20ppm
MCU communication	SDIO

Regulatory Compliance

US

FC

FCC ID: Q54CNT10003

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation; if this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient / Relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a different circuit than the receiver.
4. Consult with the dealer or an experienced radio/TV technician for help.

Change or modification not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment

WARNING:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

CAUTION:

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.