

Standalone Access Controller



Standalone Access Controller

- ❖ Offers Variety of Readers to Meet the Request of the Customers According to Installation Site, Application, Operation Mode
- ❖ Multi-Language and Voice Support (Korean / English / Spanish / Arabic / Chinese / Italian / Etc.)
- ❖ Easy Installation and Convenient System Settings
- ❖ Segmented Configuration According to the Work Environment / By Users and Devices
- ❖ System Operation via Standalone or Network Connection without Separate Management Software
- ❖ Real-Time Event (Video & Image) Storage and Transmission Support

Fingerprint Identification (Proximity / PIN) Time & Attendance/Access Controller

- LX007 : 125KHz (PSK Format/IDC Type) Proximity RF Card or PIN / Password / Fingerprint Recognition
- LX007SR : 13.56MHz (MIFARE, ISO14443 Type A Compatible) SMART Card or PIN / Password / Fingerprint Recognition



System Features

- Standalone Device with Internally Embedded Controller
- Standalone or Network Operation without Connection to the PC
- Graphic LCD Applied for Multi-Language Display and Voice Guide in Various Languages
- 12 Function Keys for Various T&A Applications (Shift Management, Overtime and etc.)
- User Name and Function Key Definition Display
- Automatic System Reset via Self-Diagnosis(Watchdog Function)
- Anti-Passback Function
- Arm/Disarm Function
- Duress Mode / 2 Men-Operation Function
- Alerts when Door Opening Time Exceeds and Forced Door Open
- Tamper Switch (2EA)
- Serial Port for Printer Connection
- Advanced Security Time Schedule Configuration
- Configuration Setting per ID (Time Schedule, Card Usage Expiration Date, Accessible Reader, Door Opening Time, etc.)
- Allows Registration of 10 Administrator Using the Fingerprint
- 3-Status Input Check (On/Off/Cut)
- Designed to Withstand ESD (Electro Static Discharge) Shock
- Firmware Upgrade via Remote Control
- Supports 26/34 Bit Wiegand Output Port(Usable to Reader)
- Compatible Software : STARWATCH STANDARD, TIME PRO, TIME BASIC, LX ACCESS PRO II, iDWATCH VIEW PRO, IAD PRO I/II, IAD BASIC I/II

Model		LX007	LX007SR
CPU		32 Bit ARM9, 8 Bit and 16 Bit Microprocessor	
Memory	Fingerprint Module	Program	128K Byte ROM, 8M Byte SDRAM
	Controller	Data	2M Byte / 2+4M Byte Flash Memory
		Program	256K Byte ROM, 512K Byte SDRAM
		Data	512K Byte Flash Memory
Fingerprint Registration		1,000 / 2,000 / 4,000	
User IDs / Event Buffers		10,000 - 20,000 Users(Including Fingerprint Registration)/10,000 - 20,000 Events(Selectable)	
Fingerprint Template Size		800 Byte for Two Fingerprints	
Reading Range		IDC80/IDC170 : Up to 10cm	IHC80 : Up to 5cm / ISC80 : Up to 10cm
Card Reading Time		30ms	
1:1 Verification/1:N Identification Time(Fingerprint)		Less than 1 Sec. / Less than 2 Sec.	
Power / Current		DC12V / Max. 650mA	
External Reader Port		1 EA : 26 Bit Wiegand, 4/8 Bit Burst for PIN for Anti-Passback	1 EA : 34 Bit Wiegand, 4/8 Bit Burst for PIN for Anti-Passback
Communication		RS232/RS485(Max. 32ch), Ethernet	
Communication Speed	Serial	57,600 bps (Default) / 9,600 bps / 19,200 bps / 38,400 bps (Selectable)	
	Ethernet	10/100 Mbps	
Input Port		4 EA : Exit Button, Door Sensor, AUX #1, AUX #2,	
Output Port		2 EA : 2 FORM-C Relay Output(COM, NO, NC)/DC 12V-18V, Rating Max. 2A 2 EA:TTL Output/DC5V, Rating Max. 20mA Can be used in 26 Bit Wiegand, using the 2 TTL Outputs Can be used in 34 Bit Wiegand, using the 2 TTL Outputs	
Language	LCD Display	Basic : English, Korean, Chinese, Spanish Arabic	
	Voice Output	Selectable : French, Italian, Russian, German, Thai	
LED Display / Buzzer		3 LED Indicators / Piezo Buzzer	
LCD		Graphic LCD(128x64 dots) 72.5x39.5mm (2.85"x1.56")Screen	
Keypad		24 Numeric Keypad with Back Lightings (Includes 12 Function Keys)	
Operating Temperature	Fingerprint Module LCD	-15° ~ +40°C / 0° ~ +50°C	
	Controller/RF Reader	-15° ~ +70°C / -35° ~ +65°C	
Operating Humidity		10% ~90% Relative Humidity Non-Condensing	
Color / Material		Black, Red Wine, Silver, Dark Gray, Black & Gold / Polycarbonate	
Dimension (W x H x T) / Weight		192 x 160 x 45mm / 800g	
Certification		FCC, CE, KCC, RoHS	
Fingerprint Module Specification			
Resolution		500dpi	
Capture Image Size/Extract Image Size		640 x 480 pixels / 260 x 300 pixels	
Sensor Area / Scanner		15 x 18.5mm / High Quality Optical Sensor	
FAR(False Acceptance Ratio)/FRR(False Reject Ratio)		0.001% / 0.1%	
ESD Tolerance		±8 KV	
Time Schedule			
Time Code	10	Holiday Code	10
Time Interval	5	Holiday	100

Multi-Modal Biometrics(Facial/Fingerprint) Time & Attendance/Access Controller

- MAC2000 : 125KHz (PSK Format/IDC Type) Proximity RF Card or PIN / Password / Fingerprint / Facial Recognition
- MAC2000SR : 13.56MHz (MIFARE, ISO14443 Type A Compatible) SMART Card or PIN / Password / Fingerprint / Facial Recognition



System Features

- Multi-Modal Biometrics Access Controller (Facial/Fingerprint Recognition)
- Windows CE Operating System Applied for Higher System Performance and Stability
- PoE (Power over Ethernet) Feature: Provides Ethernet Communication and Power Supply via Network Cable (CAT5)
- Visual Image or Video of Access Status
- Visual Image (640x480/JPEG): Up to 6,000 Images Storable
- Video (640x480/15 Frames per Sec.) : Stores up to 1000 Videos for 3~10 Sec. Duration
- Multi-Language (English, Korean and User Defined) and Voice Guide Support
- Data Transmission Using Encrypted Algorithm (3DES)
- Anti-Passback Function
- Arm/Disarm Function
- Duress Mode / 2 Men-Operation Function
- Alerts when Door Opening Time Exceeds and Forced Door Open
- Tamper Switch (2EA)
- Advanced Security Time Schedule Configuration
- Stores up to 5 Fingerprints per ID
- Configuration Setting per ID (Time Schedule, Card Usage Expiration Date, Accessible Reader, Door Opening Time, etc.)
- Allows Registration of 10 Administrator Using the Fingerprint
- 4-Status Input Check (On/Off/Short/Cut)
- Designed to Withstand ESD (Electro Static Discharge) Shock
- Firmware Upgrade via Remote Control
- Door Phone Function
- Supports 26/34 Bit Wiegand Output Port (Usable to Reader)
- Compatible Software: STARWATCH ENTERPRISE, STANDARD, TIME PRO, TIME BASIC, iDWATCH VIEW PRO

Model	MAC2000	MAC2000SR
CPU	32 Bit ARM11 Processor	
OS	Microsoft Windows CE 6.0	
Memory	Program/Data	256M Byte DDR SDRAM/128M Byte Flash Memory
	Video Storage	2G Byte
Fingerprint Registration/Face Registration	10,000 ~ 25,000 / 10,000 ~ 25,000	
User IDs / Event Buffers	100,000 Users (Including Fingerprint and Face Registration) / 500,000 Events	
Fingerprint Template Size	500 Byte per Single Fingerprint	
Face Template Size	700 Byte per Single Face	
Reading Range	IDC80, IDC170 : Up to 10cm	ISC80 : Up to 10cm
Card Reading Time	30ms	
1:1 Verification/1:N Identification Time(Fingerprint)	Less than 1 Sec. / Less than 2 Sec.	
Power / Current	DC12V (or PoE) / Max. 800mA *PoE (IEEE802.3af compliant:12V/1A)	
External Reader Port	1 EA : 26 Bit Wiegand, 4/8 Bit Burst for PIN for Anti-Passback	1 EA : 34 Bit Wiegand, 4/8 Bit Burst for PIN for Anti-Passback
Communication/Communication Speed	Ethernet / 10/100 Mbps	
Input Port	4 EA : Exit Button, Door Sensor, AUX #1, AUX #2,	
Output Port	2 EA : 2 FORM-C Relay Output (COM, NO, NC) / DC 12V ~ 18V, Rating Max. 2A	
	2 EA : TTL Output / DC5V, Rating Max. 20mA	
	1 EA : Video Signal for DVR	
	1 EA : 26 Bit Wiegand	1 EA : 34 Bit Wiegand
USB Port	2 EA : USB 1.1 Support	
Camera / LCD	NTSC : CCD Color Board Camera(Total Pixel:410K) PAL : CCD Color Board Camera(Total Pixe :470K)/TFT Color(16.7M) LCD(320x240)	
Language LCD Display/Voice Output	English (Default), Korean, User-Defined / English (Default)	
Keypad/Operating Temperature/	20 Numeric Keypad(Includes 4 Function Keys) / 0°~ +50°C	
Operating Humidity	10%~90% Relative Humidity Non-Condensing	
Color/Material/Dimension(WxHxT)	Black / Polycarbonate / 104 x 290 x 51.8mm	
Certification	FCC, CE, KCC, RoHS, UL	

Fingerprint Module Specification		Face Recognition Module Specification	
Resolution	500dpi	Resolution	768x494 pixels(NTSC), 752x582(PAL)
Capture Image Size	640 x 480 pixels	Capture Image Size	640 x 480 pixels
Extract Image Size	260 x 300 pixels	Face Recognition Size	700 Byte
Sensor Area	15 x 18.5mm	Sensor	SONY 1/3" CCD
Scanner	High Quality Optical Sensor	ESD	15 KV
ESD Tolerance	±8 KV		
FAR(False Acceptance Ratio)	0.001%		
FRR(False Reject Ratio)	0.1%		

Time Schedule			
Time Code	10	Holiday Code	10
Time Interval	5	Holiday	100

Fingerprint Identification(Camera Embedded) Time & Attendance/Access Controller

- MAC1000 : 125KHz (PSK Format/IDC Type) Proximity RF Card or PIN / Password / Fingerprint Recognition
- MAC1000SR : 13.56MHz (MIFARE, ISO14443 Type A Compatible) SMART Card or PIN / Password / Fingerprint Recognition



System Features

- Fingerprint Controller Used with Video Image
- Windows CE Operating System Applied for Higher System Performance and Stability
- PoE (Power over Ethernet) Feature: Provides Ethernet Communication and Power Supply via Network Cable (CAT5)
- Visual Image or Video of Access Status
- Visual Image (640x480/JPEG): Up to 6,000 Images Storable
- Video (640x480/15 Frames per Sec.)
: Stores up to 1000 Videos for 10 Sec. Duration
- Multi-Language (English, Korean and User Defined) and Voice Guide Support
- Data Transmission Using Encrypted Algorithm (3DES)
- Anti-Passback Function
- Arm/Disarm Function
- Duress Mode / 2 Men-Operation Function
- Alerts when Door Opening Time Exceeds and Forced Door Open
- Tamper Switch (2EA)
- Advanced Security Time Schedule Configuration
- Stores up to 5 Fingerprints per ID
- Configuration Setting per ID (Time Schedule, Card Usage Expiration Date, Accessible Reader, Door Opening Time, etc.)
- Allows Registration of 10 Administrator Using the Fingerprint
- 4-Status Input Check (On/Off/Short/Cut)
- Designed to Withstand ESD (Electro Static Discharge) Shock
- Firmware Upgrade via Remote Control
- Door Phone Function
- Supports 26/34 Bit Wiegand Output Port (Usable to Reader)
- Compatible Software: STARWATCH ENTERPRISE, STANDARD, TIME PRO, TIME BASIC, iDWATCH VIEW PRO

Model		MAC1000	MAC1000SR
CPU		32 Bit ARM11 Processor	
OS		Microsoft Windows CE 6.0	
Memory	Program	256M Byte DDR SDRAM	
	Data	128M Byte Flash Memory	
	Video Storage	2G Byte	
Fingerprint Registration		10,000 ~ 25,000 Users	
User IDs / Event Buffers		100,000 Users (Including Fingerprint Registration) / 500,000 Events	
Fingerprint Template Size		500 Byte per Single Fingerprint	
Reading Range		IDC80, IDC170 : Up to 10cm	ISC80 : Up to 10cm
Card Reading Time		30ms	
1:1 Verification/1:N Identification Time(Fingerprint)		Less than 1 Sec. / Less than 2 Sec.	
Power / Current		DC12V (or PoE) / Max. 800mA *PoE (IEEE802.3af compliant:12V/1A)	
External Reader Port		1 EA : 26 Bit Wiegand, 4/8 Bit Burst for PIN for Anti-Passback	1 EA : 34 Bit Wiegand, 4/8 Bit Burst for PIN for Anti-Passback
Communication/Communication Speed		Ethernet / 10/100 Mbps	
Input Port		4 EA : Exit Button, Door Sensor, AUX #1, AUX #2,	
Output Port		2 EA : 2 FORM-C Relay Output (COM, NO, NC) / DC 12V ~ 18V, Rating Max. 2A 2 EA : TTL Output / DC5V, Rating Max. 20mA 1 EA : Video Signal for DVR	
		1 EA : 26 Bit Wiegand	1 EA : 34 Bit Wiegand
USB Port		2 EA : USB 1.1 Support	
Camera / LCD		NTSC : CCD Color Board Camera (Total Pixel:410K) PAL : CCD Color Board Camera (Total Pixel:470K)/TFT Color(16.7M) LCD(320x240)	
Language LCD Display/Voice Output		English (Default), Korean, User-Defined / English (Default)	
Keypad/Operating Temperature		20 Numeric Keypad (Includes 4 Function Keys) / 0° ~ +50°C	
Operating Humidity		10% ~90% Relative Humidity Non-Condensing	
Color/Material/Dimension(WxHxT)		Black / Polycarbonate / 104 x 290 x 51.8mm	
Certification		FCC, CE, KCC, RoHS, UL	
Fingerprint Module Specification			
Resolution		500dpi	
Capture Image Size		640 x 480 pixels	
Extract Image Size		260 x 300 pixels	
Sensor Area		15 x 18.5mm	
Scanner		High Quality Optical Sensor	
ESD Tolerance		±8 KV	
FAR(False Acceptance Ratio)/FRR(False Reject Ratio)		0.001% / 0.1%	
Time Schedule			
Time Code	10	Holiday Code	10
Time Interval	5	Holiday	100

Fingerprint Identification (Proximity / PIN) Time & Attendance/ Access Controller

- FINGER007 : 125KHz (PSK Format/IDC Type) Proximity RF Card or PIN / Password / Fingerprint Recognition
- IP-FINGER007 : 125KHz (ASK [EM]Format) Proximity RF Card or PIN / Password / Fingerprint Recognition
- FINGER007SR : 13.56MHz (MIFARE, ISO14443 Type A Compatible) SMART Card or PIN / Password / Fingerprint Recognition
- FINGER007SRB : Fingerprint Stored 13.56MHz MIFARE SMART Card or PIN / Password / Fingerprint Recognition



System Features

- Standalone Device with Internally Embedded Controller
- Standalone or Network Operation without Connection to the PC
- Automatic System Reset via Self-Diagnosis (Watchdog Function)
- Anti-Passback Function
- Duress Mode Function
- Alerts when Door Opening Time Exceeds and Forced Door Open
- Tamper Switch (2EA)
- Time Display on LCD
- 3-Status Input Check (On/Off/ Cut)
- Designed to Withstand ESD (Electro Static Discharge) Shock
- Firmware Upgrade via Remote Control
- Supports 26/34 Bit Wiegand Output Port(Usable to Reader)
- Compatible Software: STARWATCH STANDARD, TIME PRO, TIME BASIC, DUAL PRO I/II, iDWATCH VIEW PRO

* FINGER007SRB

- Identifies Card that has been Issued by PRG2000B Card Programmer (ID and Fingerprint Template Encrypted into Smart Card)
- Maintains High Security as the Card cannot be Duplicated without Data Sector and Secure Key Information
- Protects User Privacy as Encrypted Fingerprint Information is Stored in User's Card (Fingerprint Information is not Stored in the Device or Database)

Model	FINGER007/IP-FINGER007	FINGER007SR	FINGER007SRB	
CPU	32 Bit ARM9 and Dual 8 Bit Microprocessor			
Memory	Fingerprint Program	1MByte Flash Memory		
	Module Data	1M Byte / 2M Byte / 4M Byte Flash Memory	8M Byte SDRAM	
	Controller	Program	128K Byte Flash Memory	
		Data	1M Byte Flash Memory	
Fingerprint Registration	1,000/ 2,000/ 4,000		10,000 ~ 50,000	
User IDs / Event Buffers	10,000 ~ 50,000 Users(Including Fingerprint Registration) / 10,000 ~ 50,000 Events			
Fingerprint Template Size	800 Byte for Two Fingerprint		400 Byte for One Fingerprint	
Reading Range	FINGER007:IDC80/IDC170:Up to 10cm	IHC80 : Up to 5cm		
	IP- FINGER007:	ISC80 : Up to 10cm		
	IPC80/IPC170 : Up to 10cm			
Card Reading Time	30ms			
1:1 Verification/1:N Identification Time(Fingerprint)	Less than 1 Sec. / Less than 2 Sec.			
Power / Current	DC12V / Max 300mA			
External Reader Port	1 EA:26bit Wiegand	1 EA:34 Bit Wiegand	1 EA:26Bit Wiegand	
	4/8 Bit Burst for PIN for Anti-Passback	4/8 Bit Burst for PIN for Anti-Passback	4/8 Bit Burst for PIN for Anti-Passback	
Communication	RS232/RS485(Max. 32ch), Ethernet(Internal Module or External Converter Required/Optional)			
Communication	Serial	9,600 bps(Default) / 19,200 bps / 38,400 bps / 57,600 bps / 115,200 bps(Selectable)		
Speed	Ethernet	10/100Mbps		
Input Port	4 EA : Exit Button, Door Sensor, AUX #1, AUX #2,			
Output Port	2 EA : 2 FORM-C Relay Output (COM, NO, NC) / DC 12V ~ 18V, Rating Max. 2A			
	2 EA:TTL Output/DC5V, Rating Max. 20mA			
	Can be used in 26 Bit Wiegand, using the 2 TTL Outputs	Can be used in 34 Bit Wiegand, using the 2 TTL Outputs	Can be used in 26 Bit Wiegand, using the 2 TTL Outputs	
LED Display / Buzzer	7 LED Indicators / Piezo Buzzer			
LCD	Character LCD (2 Lines x 16 Char) / 65.6 x 13.8 mm (2.62" x 0.55") Screen			
Keypad	16 Numeric Keypad with Back Lightings / Membrane			
Operating Temperature	Fingerprint Module LCD	-15° ~ + 40° C / 0° ~ + 50° C		
	Controller/RF Reader	-15° ~ + 70° C / -35° ~ + 65° C		
Operating Humidity/Color/Material	10% ~ 90% Relative Humidity Non-Condensing / Dark Pearl Gary / Polycarbonate			
Dimension (W x H x T) / Weight	161.5 x 134 x 48.5mm / 525g			
Certification	FCC, CE, KCC, RoHS			
Fingerprint Module Specification				
Resolution/Capture Image Size/Extract Image Size	500dpi / 640 x 480 pixels / 260 x 300 pixels			
Sensor Area / Scanner	15 x 18.5mm / High Quality Optical Sensor			
FAR(False Acceptance Ratio)FRR(False Reject Ratio)/ESD Tolerance	0.001% / 0.1% / ±8 KV			
Time Schedule				
Time Code	10	Holiday Code	10	
Time Interval	5	Holiday	100	

Proximity / PIN Time & Attendance / Access Controller

- LX505 : 125KHz (PSK Format/IDC Type) Proximity RF Card or PIN / Password Recognition
- LX505SR : 13.56MHz (MIFARE, ISO14443 Type A Compatible) SMART Card or PIN Recognition



System Features

- Standalone Device with Internally Embedded Controller
- Standalone or Network Operation without Connection to the PC
- Graphic LCD Applied for Multi-Language Display and Voice Guide in Various Languages
- 12 Function Keys for Various T&A Applications (Shift Management, Overtime and etc.)
- Automatic System Reset via Self-Diagnosis (Watchdog Function)
- Anti-Passback Function
- Arm/Disarm Function
- Duress Mode / 2 Men-Operation Function
- Alerts when Door Opening Time Exceeds and Forced Door Open
- Tamper Switch (2EA)
- Serial Port for Printer Connection
- Advanced Security Time Schedule Configuration
- Configuration Setting per ID (Time Schedule, Card Usage Expiration Date, Accessible Reader, Door Opening Time, etc.)
- Allows Registration of 10 Administrator Using the Fingerprint
- Input Status Check Function (3-Status: On/Off/Cut)
- Designed to Withstand ESD (Electro Static Discharge) Shock
- Firmware Upgrade via Remote Control
- User Name and Function Key Defined Display
- Supports 26/34 Bit Wiegand Output Port(Usable to Reader)
- Compatible Software : STARWATCH STANDARD, TIME PRO, TIME BASIC, LX ACCESS PRO II, iDWATCH VIEW PRO, IAD PRO I/II, IAD BASIC I/II

Model		LX505	LX505SR
CPU		8 Bit and 16 Bit Microprocessor	
Memory	Program	256K Byte ROM, 512K Byte SRAM	
	Data	512K Byte Flash Memory	
User IDs / Event Buffers		10,000 ~ 20,000 Users / 10,000 ~ 20,000 Events (Selectable)	
Reading Range		IDC80/IDC170 : Up to 10cm	IHC80 : Up to 5cm / ISC80 : Up to 10cm
Card Reading Time		30ms	
Power / Current		DC12V / Max 550mA	
External Reader Port		1 EA : 26 Bit Wiegand/ 4/8 Bit Burst for PIN for Anti-Passback	1 EA : 34 Bit Wiegand/ 4/8 Bit Burst for PIN for Anti-Passback
Communication		RS232/RS485(Max. 32ch), Ethernet(Internal Module or External Converter Required/Optional)	
Communication Speed	Serial	57,600 bps (Default) / 9,600 bps / 19,200 bps / 38,400 bps (Selectable)	
	Ethernet	10/100Mbps	
Input Port		4 EA : Exit Button, Door Sensor, AUX #1, AUX #2,	
Output Port		2 EA : 2 FORM-C Relay Output (COM, NO, NC) / DC 12V ~ 18V, Rating Max. 2A 2 EA:TTL Output / DC5V, Rating Max. 20mA Can be used in 26 Bit Wiegand, using the 2 TTL Outputs Can be used in 34 Bit Wiegand, using the 2 TTL Outputs	
Language	LCD Display	Basic : English, Korean, Chinese, Spanish Arabic	
	Voice Output	Selectable : French, Italian, Russian, German, Thai	
LED Display / Buzzer		3 LED Indicators / Piezo Buzzer	
LCD		Graphic LCD(128x64 dots) 72.5x39.5mm (2.85"x1.56")Screen	
Keypad		24 Numeric Keypad with Back Lightings (Includes 12 Function Keys)	
Operating Temperature	LCD	0° ~ +50°C	
	Controller	-15° ~ +70°C	
	RF Reader	-35° ~ +65°C	
Operating Humidity		10% ~90% Relative Humidity Non-Condensing	
Color / Material		Black, Red Wine, Silver, Dark Gray, Black & Gold / Polycarbonate	
Dimension(W x H x T) / Weight		192 x 160 x 45mm / 750g	
Certification		FCC, CE, KCC, RoHS	
Time Schedule			
Time Code	10	Holiday Code	10
Time Interval	5	Holiday	100

Proximity / PIN Time & Attendance / Access Controller



- 505R : 125KHz (PSK Format/IDC Type) Proximity RF Card or PIN / Password Recognition
- IP505R : 125KHz (ASK [EM]Format) Proximity RF Card or PIN / Password Recognition
- SR505 : 13.56MHz (MIFARE, ISO14443 Type A Compatible) SMART Card or PIN / Password Recognition
- SR505B : Fingerprint Stored 13.56MHz MIFARE SMART Card or PIN / Password Recognition

System Features

- Standalone Device with Internally Embedded Controller
- Standalone or Network Operation without Connection to the PC
- Automatic System Reset via Self-Diagnosis (Watchdog Function)
- Anti-Passback Function
- Duress Mode Function
- Alerts when Door Opening Time Exceeds and Forced Door Open
- Tamper Switch (2EA)
- Time Display on LCD
- 3-Status Input Check (On/Off/Cut)
- Designed to Withstand ESD (Electro Static Discharge) Shock
- Firmware Upgrade via Remote Control
- Supports 26/34 Bit Wiegand Output Port(Usable to Reader)
- Compatible Software: STARWATCH STANDARD, TIME PRO, TIME BASIC, DUAL PRO I/II, iDWATCH VIEW PRO

* SR505B

- Identifies Card that has been Issued by PRG2000B Card Programmer (ID and Fingerprint Template Encrypted into Smart Card)
- Maintains High Security as the Card cannot be Duplicated without Data Sector and Secure Key Information
- Protects User Privacy as Encrypted Fingerprint Information is Stored in User's Card (Fingerprint Information is not Stored in the Device or Database)

Model	505R	IP505R	SR505	SR505B
CPU	Dual 8 Bit Microprocessor			
Memory	Program	128K Byte Flash Memory		
	Data	1M Byte Flash Memory		
User IDs / Event Buffers	10,000 ~ 50,000 Users / 10,000 ~ 50,000 Events			
Reading Range	IDC80/ IDC170	IPC80/ IPC170	IHC80 : Up to 5cm	
	: Up to 10cm	: Up to 10cm	ISC80 : Up to 10cm	
Card Reading Time	30ms			
Power / Current	DC12V / Max 150mA			
External Reader Port	1 EA:26 Bit Wiegand		1 EA:34 Bit Wiegand	1 EA:26 Bit Wiegand
	4/8 Bit Burst for PIN		4/8 Bit Burst for PIN	4/8 Bit Burst for PIN
Communication	RS232/RS422(Max. 32ch), Ethernet(Internal Module or External Converter Required/Optional)			
Communication	Serial	9,600 bps(Default)/ 19,200 bps/ 38,400 bps/ 57,600 bps/ 115,200 bps(Selectable)		
Speed	Ethernet	10/100Mbps		
Input Port	4 EA : Exit Button, Door Sensor, AUX #1, AUX #2,			
Output Port	2 EA : 2 FORM-C Relay Output (COM, NO, NC) / DC 12V ~ 18V, Rating Max. 2A			
	2 EA:TTL Output / DC5V, Rating Max. 20mA			
	Can be used in 26 Bit Wiegand, using the 2 TTL Outputs	Can be used in 34 Bit Wiegand, using the 2 TTL Outputs	Can be used in 34 Bit Wiegand, using the 2 TTL Outputs	
LED Display / Buzzer	7 LED Indicators / Piezo Buzzer			
LCD	Character LCD (2 Lines x 16 Char) / 65.6 x 13.8 mm (2.62" x 0.55") Screen			
Keypad	16 Numeric Keypad with Back Lightings			
Operating Temperature	LCD	0 ° ~ + 50 ° C		
	Controller	-15 ° ~ + 70 ° C		
	RF Reader	-35 ° ~ + 65 ° C		
Operating Humidity	10% ~ 90% Relative Humidity Non-Condensing			
Color / Material	Dark Pearl Gary / Polycarbonate			
Dimension (W x H x T) / Weight	150 x 120 x 39.5mm / 400g			
Certification	FCC, CE, KCC, RoHS			

Time Schedule

Time Code	10	Holiday Code	10
Time Interval	5	Holiday	32

Time & Attendance System Package



505R (1 EA) Cable (1 EA)



Management Software (1 EA)



Adaptor (1 EA) (AC110/220V, DC 12V, 1A)



IDC80 Card (5 EA)

Proximity / PIN Access Controller

- 100R / 100W : 125KHz (PSK Format/IDC Type) Proximity RF Card or PIN / Password Recognition
- IP100R :125KHz(ASK [EM]Format) Proximity RF Card or PIN / Password Recognition
- PIN120 / PIN120W : PIN / Password Recognition



System Features

* 100R/100W/IP100R

- Input/Output and Operation Time Setting Using the Keypad
- Door Lock Type Selectable (Power Fail Safe/Power Fail Secure)
- Keypad Lock by Try-Out Error Alarm Function
- Tamper Switch (2 EA)
- Duress Mode Function
- Toggle Mode for Door Opening / Closing
- Chime Bell Output
- Weatherproofed Model: 100W
- Supports 26/34 Bit Wiegand Output Port(Usable to Reader)
- Compatible Software : STAR 100R



Model	100R / 100W	IP100R	PIN120 / PIN120W
CPU	Dual 8 Bit Microprocessor		8 Bit Microprocessor
Memory	Program	20K Byte ROM	8K Byte ROM
	Data	2K Byte EEPROM	2K Byte EEPROM
User IDs	512 Users (Includes 1 Master Card)		512 Users
Reading Range	IDC80/ IDC170: Up to 10cm		PIN only
Card Reading Time	30ms		
External Reader Port	1 EA : 26 Bit Wiegand		N/A
Power / Current	DC12V / Max 200mA		
Communication	RS232		N/A
Input Port	5 EA : Exit Button, Door Sensor, AUX #1, AUX #2, AUX #3		1 EA : Exit Button
Output Port	2 EA : 2 FORM-C Relay Output(COM, NO, NC) / DC 12V ~ 18V, Rating Max. 2A		
	1 EA : Chime Bell Output / DC5V, Rating Max. 500mA		
	1 EA : TTL Output / DC5V, Rating Max. 20mA		
	Can be used in 26 Bit Wiegand, using the 1 TTL Output	N/A	
Keypad	12 Numeric Keypad with Back Lightings (100W / PIN120W : Membrane)		
LED Display / Buzzer	3 LED Indicators / Piezo Buzzer		
Operating Temperature	-30° ~ +50°C		
Operating Humidity	10% ~90% Relative Humidity Non-Condensing		
Color / Material	Dark Pearl Gary / Polycarbonate		
Dimension (W x H x T)	87 x 100 x 31mm		
Weight	210g		162g
Certification	FCC, CE, KCC, RoHS		

* PIN120/PIN120W

- Input/Output and Operation Time Setting Using the Keypad
- Keypad Lock by Try-Out Error Alarm Function
- Tamper Switch (1 EA)
- Chime Bell Output
- Weatherproofed Model: PIN120W



Proximity Access Controller

- RFL200 / RFL200C : 125KHz (PSK Format/IDC Type) Proximity RF Card Recognition
- IP-RFL200 / IP-RFL200C : 125KHz (ASK [EM]Format) Proximity RF Card Recognition



System Features

- Door Lock Type Selectable (Power Fail Safe/Power Fail Secure)
- Outdoor Installation (Epoxy Molding / Outdoor Capacity - IP66)
- Device Information and Operation Status Display via Nine LED and Buzzer

* RFL200 / IP-RFL200

- User Registration and Deletion Using the Master Card (5 Key Tags Included)

* RFL200C / IP-RFL200C

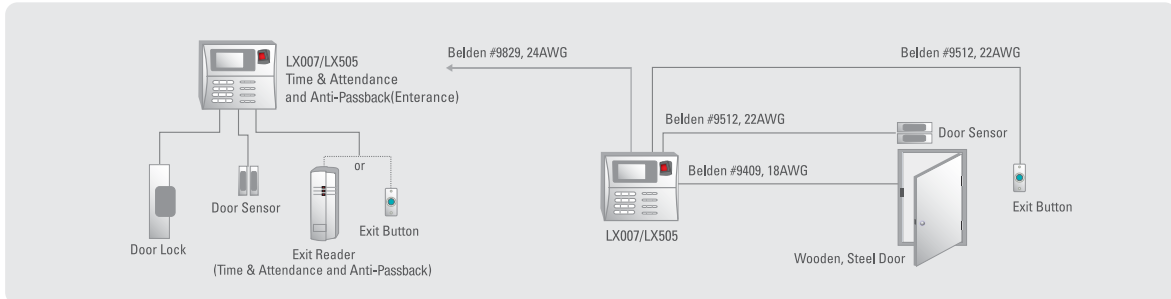
- User Registration, Deletion and Device Setting Using the Management Software
- Compatible Software : STAR RFL200C



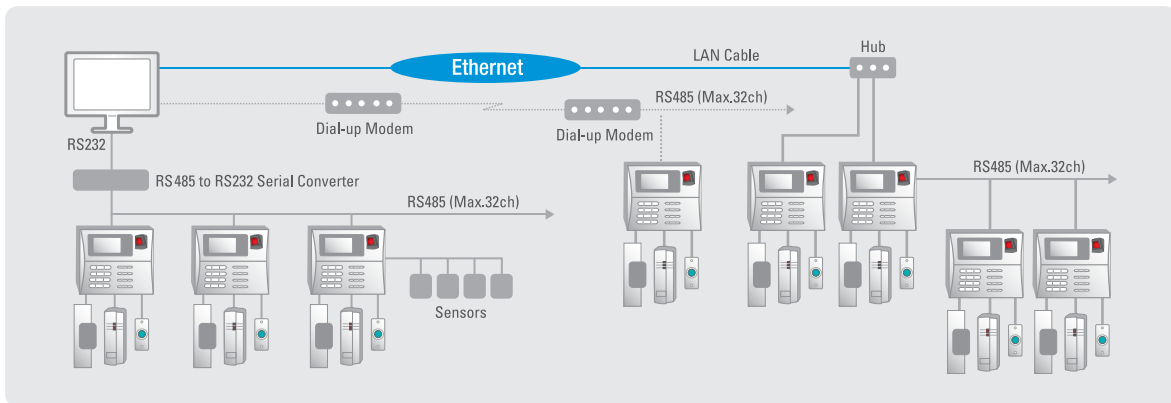
Model	RFL200	IP-RFL200	RFL200C	IP-RFL200C
CPU	Dual 8 Bit Microprocessor			
Memory	Program		64K Byte Flash ROM	
	Data		4K Byte EEPROM	
User IDs / Event Buffers	512 Users (Includes 1 Master Card)		512 Users / 256 Events	
Reading Range	IDC80, IDC170	IPC80, IPC170	IDC80, IDC170	IPC80, IPC170
	: Up to 10cm	: Up to 10cm	: Up to 10cm	: Up to 10cm
Card Reading Time	30ms			
Power / Current	DC12V / Max 150mA			
Communication	N/A		RS485 (Max. 255ch), Ethernet (External LAN Converter Required)	
Communication Speed	N/A		9,600bps, 10/100Mbps	
Input Port	3 EA : Exit Button, Door Sensor, AUX #1		3 EA : Exit Button, Door Sensor, AUX #1	
	Door Lock Type Selectable			
Output Port	2 EA : TR Output, Alarm Output / DC 12V, Rating Max. 300mA Lock Output / DC 12V, Rating Max. 1A			
LED Display / Buzzer	9 LED Indicators / Piezo Buzzer			
Operating Temperature	Controller		-20 ° ~ + 50 ° C	
	RF Reader		-20 ° ~ + 50 ° C	
Operating Humidity	10% ~90% Relative Humidity Non-Condensing			
Color / Material	Dark Pearl Gary / Polycarbonate			
Dimension(W x H x T) / Weight	45 x 124 x 19.6mm / 80g			
Certification	FCC, CE, KCC, RoHS			

LX007/LX505 Series

- Standalone Configuration

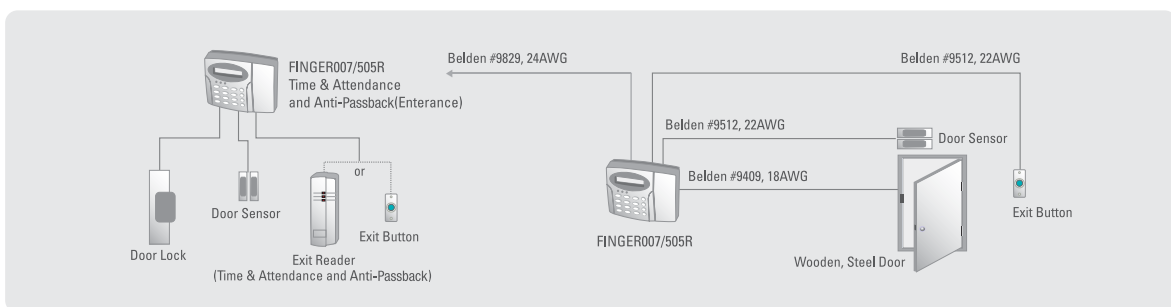


- Network Configuration

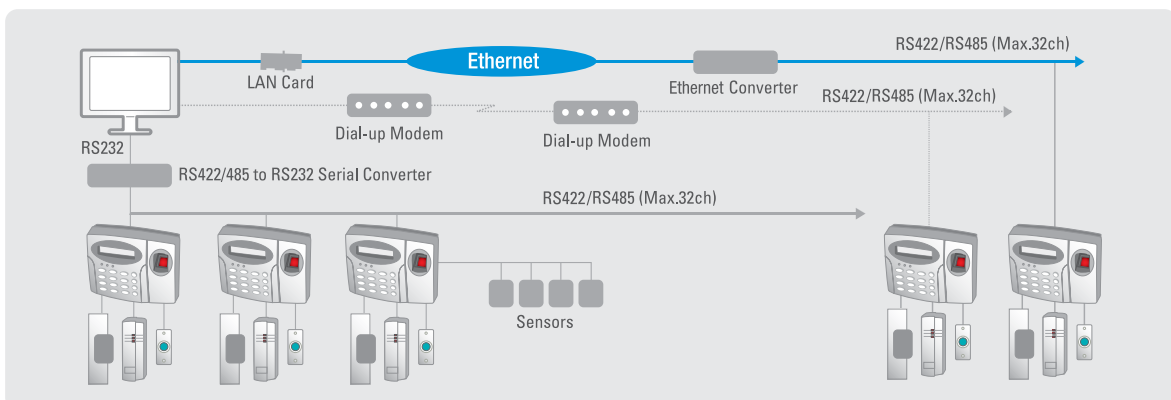


FINGER007/505R Series

- Standalone Configuration

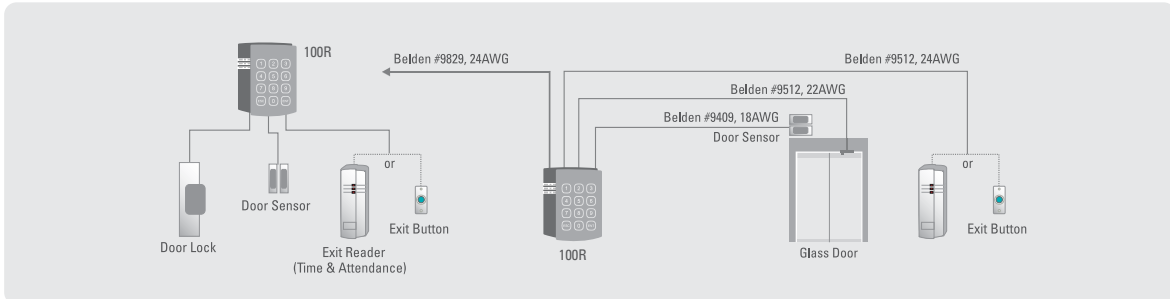


- Network Configuration

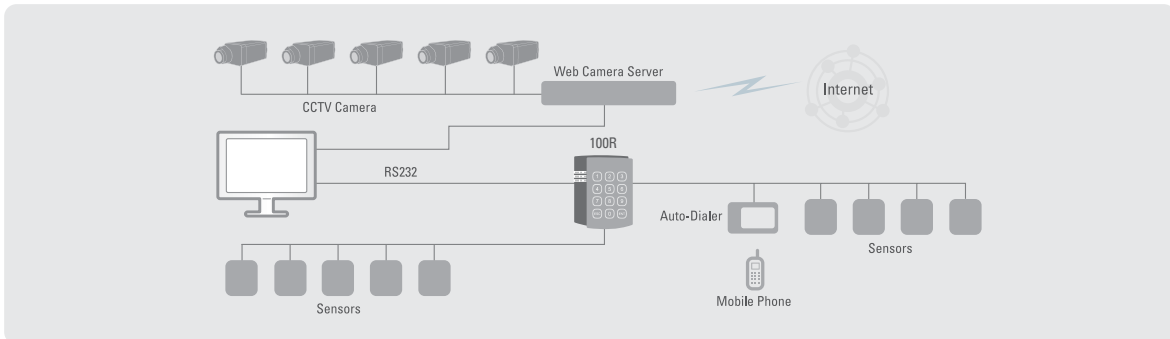


❖ 100R/100W/PIN120/PIN120W Series

• Standalone Configuration

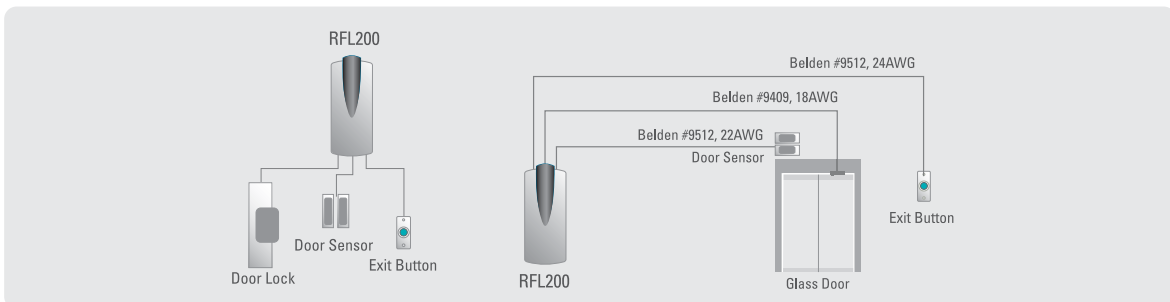


• Network Configuration

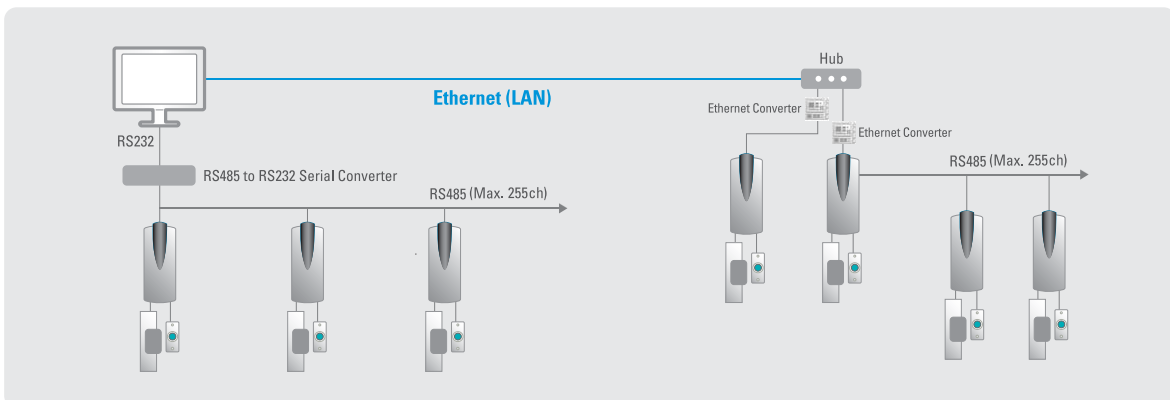


❖ RFL200/RFL200C Series

• Standalone Configuration



• Network Configuration



Standalone Access Controller Guide [Biometrics]



Common Features

Control Door	1 EA	1 EA	1 EA	1 EA
Event Buffer	500,000	500,000	20,000~10,000	20,000~10,000
Fingerprint User	10,000 ~ 25,000	10,000 ~ 25,000	1,000 / 2,000 / 4,000	1,000 / 2,000 / 4,000
ID User	100,000	100,000	10,000 ~ 20,000	10,000 ~ 20,000
Fingerprint Template Size	500 Byte per Single Fingerprint Stores 2-5 Fingerprint Templates per ID		800 Byte for 2 Fingerprints	800 Byte for 2 Fingerprints
Face Template Size	700 Byte per Single Face	N/A	N/A	N/A
External Reader Port (For Anti-Passback)	YES	YES	YES	YES
Frequency	125KHz/13.56MHz	125KHz/13.56MHz	125KHz	13.56MHz
Format	PSK / IDC Type	PSK / IDC Type	PSK / IDC Type	MIFARE, ISO14443 Type A
Communication	Ethernet	Ethernet	RS232/RS485 (32ch) Ethernet	
Input Port / Output Port	4 EA / 6 EA	4 EA / 6 EA	4 EA / 4 EA	4 EA / 4 EA
USB Port	2 EA (1.1 Support)	2 EA (1.1 Support)	N/A	N/A
Real Time Clock	YES	YES	YES	YES
Time	Time Code	10	10	10
Schedule	Holiday Code	10	10	10
Tamper Switch	2 EA	2 EA	2 EA	2 EA
Camera	CCD Color Board Camera	CCD Color Board Camera	N/A	N/A
LCD	YES (TFT Color LCD)	YES (TFT Color LCD)	YES (Graphic LCD)	YES (Graphic LCD)
LED Indicator	YES	YES	YES	YES
Buzzer	YES	YES	YES	YES
Reading Range	Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm

Operation Mode

Fingerprint Recognition	YES	YES	YES	YES
RF	YES	YES	YES	YES
RF + Fingerprint Recognition	YES	YES	YES	YES
RF + Fingerprint + Face Recognition	YES	NO	NO	NO
RF + Password(4 Digits)	YES	YES	YES	YES
RF+Password(4 Digits)+Fingerprint Recognition	YES	YES	YES	YES
PIN	YES	YES	YES	YES
PIN + Fingerprint Recognition	YES	YES	YES	YES
PIN + Password (4 Digits)	YES	YES	YES	YES
PIN+Password(4 Digits)+Fingerprint Recognition	YES	YES	YES	YES



FINGER007

IP-FINGER007



FINGER007SR

FINGER007SRB

Common Features

1 EA	1 EA	1 EA	1 EA
10,000 ~ 50,000	10,000 ~ 50,000	10,000 ~ 50,000	10,000 ~ 50,000
1,000/ 2,000/ 4,000	1,000/ 2,000/ 4,000	1,000/ 2,000/ 4,000	10,000 ~ 50,000
10,000 ~ 50,000	10,000 ~ 50,000	10,000 ~ 50,000	10,000 ~ 50,000
800 Byte for 2 Fingerprints	800 Byte for 2 Fingerprints	800 Byte for 2 Fingerprints	400 Byte for 1 Fingerprint
N/A	N/A	N/A	N/A
YES	YES	YES	YES
125KHz	125KHz	13.56MHz	13.56MHz
PSK / IDC Type	ASK[EM]	MIFARE, ISO14443 Type A	MIFARE
RS232/RS422(32ch) Ethernet[Internal Module or External Converter Required / Optional]	RS232/RS422(32ch) Ethernet[Internal Module or External Converter Required / Optional]	RS232/RS422(32ch) Ethernet[Internal Module or External Converter Required / Optional]	RS232/RS422(32ch) Ethernet[Internal Module or External Converter Required / Optional]
4 EA / 4 EA	4 EA / 4 EA	4 EA / 4 EA	4 EA / 4 EA
N/A	N/A	N/A	N/A
YES	YES	YES	YES
10	10	10	10
10	10	10	10
2 EA	2 EA	2 EA	2 EA
N/A	N/A	N/A	N/A
YES (Character LCD)	YES (Character LCD)	YES (Character LCD)	YES (Character LCD)
YES	YES	YES	YES
YES	YES	YES	YES
Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm

Operation Mode

YES	YES	YES	N/A
YES	YES	YES	YES
YES	YES	YES	YES
NO	NO	NO	NO
YES	YES	YES	YES
YES	YES	YES	YES
YES	YES	YES	YES
YES	YES	YES	N/A
YES	YES	YES	YES
YES	YES	YES	N/A

Standalone Access Controller Guide [Proximity]



Common Features

Control Door	1 EA	1 EA	1 EA	1 EA	1 EA
Event Buffer	10,000~20,000	10,000~20,000	10,000~50,000	10,000~50,000	10,000~50,000
ID User	10,000~20,000	10,000~20,000	10,000~50,000	10,000~50,000	10,000~50,000
External Reader Port (For Anti-Passback)	YES	YES	YES	YES	YES
Frequency	125KHz	13.56MHz	125KHz	125KHz	13.56MHz
Format	PSK / IDC Type	MIFARE, ISO14443 Type A	PSK / IDC Type	ASK[EM] MIFARE (SR505B)	MIFARE, ISO14443 Type A (SR505)
Communication	RS232/RS485 (32ch) Ethernet		RS232/RS485 (32ch) Ethernet (Internal Module or External Converter Required / Optional)		
Input Port	4 EA	4 EA	4 EA	4 EA	4 EA
Output Port	4 EA	4 EA	4 EA	4 EA	4 EA
Real Time Clock	YES	YES	YES	YES	YES
Tamper Switch	2 EA	2 EA	2 EA	2 EA	2 EA
LCD	YES	YES	YES	YES	YES
Keypad	YES	YES	YES	YES	YES
LED Indicator	YES	YES	YES	YES	YES
Buzzer	YES	YES	YES	YES	YES
Reading Range	Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm

Operation Mode

RF	YES	YES	YES	YES	YES
PIN	YES	YES	YES	YES	YES
RF + Password (4 Digits)	YES	YES	YES	YES	YES
PIN + Password (4 Digits)	YES	YES	YES	YES	YES



RFL200

IP-RFL200

RFL200C

IP-RFL200C



100R/100W



PIN120/PIN120W

IP100R

Common Features

1 EA	1 EA	1 EA	1 EA	1 EA	1 EA	1 EA
N/A	N/A	256	256	N/A	N/A	N/A
512	512	512	512	512	512	512
N/A	N/A	N/A	N/A	N/A	N/A	N/A
125KHz	125KHz	125KHz	125KHz	125KHz	N/A	125KHz
PSK / IDC Type	ASK[EM]	PSK / IDC Type	ASK[EM]	PSK / IDC Type	N/A	ASK[EM]
N/A	N/A	RS485 (255ch) Ethernet (External LAN Converter Required (Optional))		RS232	N/A	RS232
3 EA	3 EA	3 EA	3 EA	5 EA	1 EA	5 EA
2 EA	2 EA(Door Lock Output Port Included)	2 EA	2 EA(Door Lock Output Port Included)	4 EA	3 EA	4 EA
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	2 EA	1 EA	2 EA
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES
Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm	Up to 10 cm

Operation Mode

YES	YES	YES	YES	YES	N/A	YES
N/A	N/A	N/A	N/A	YES	YES	YES
N/A	N/A	N/A	N/A	YES	N/A	YES
N/A	N/A	N/A	N/A	N/A	N/A	N/A