

1. DESCRIPTION OF SCHEMATICS

The Exiting coil generates high power 125KHz sinusoidal frequency and envelope detector of Proximity Reader detects encrypted data from the proximity card and decodes received data and generates 26 bit Wiegand signal if the received data matches its encryption code. 26 bit Wiegand signal enters into the interrupt routine of the Main CPU so that the read data from the Proximity Reader can be stored into the buffer of Main CPU at any time. The Main CPU receives the 26 bit Wiegand signal (Card ID number) from the proximity reader and confirms whether the ID number is registered, within the valid Time Schedule, Holiday Schedule and right sequence of Anti-pass Back. When the all flags are confirmed, the Main CPU releases the door relay for the door open time set for this user and save this event to the event buffer. The keypad can be used for entering the PIN or Password. When an input signal is detected, for example, the motion detect sensor is activated or an exit button pressed, the controller generates and logs an appropriate response for the input signal. All event transaction data is stored into the data memory and to be sent to the host computer when the communication is established. The TCP/IP communication port is connected to the Serial Interrupt of the Main CPU and continuously checks whether the host PC tries hand-shake with the device. When the host PC sends a command to the device, the command is received from the RXD port of the Main CPU, which then interprets the command and takes a corresponding action and sends a relative resulting command and event transaction data to the host PC through the TXD port of the Main CPU. For TCP/IP communication to the host PC, TCP/IP module (IIM7100A) has to be mounted onto the device. The SSA-S2100 has 24-keypads (10 Numeric keys, 2 Control keys, 12 Function keys) and scans all signals from the Keypads every millisecond and generates corresponding outputs according to the configuration stored in the Data Memory and internal RTC (Real Time Clock) counts the exact output times set by user. The integrated keypad and LCD display can be used for the entire programming process, even without connection to a host PC. The internal Buzzer makes beep sounds when you press the keypad or a proximity card is read. The Red LED is power indicator, and it always on when the device is powered on. The Green LED is turned on while the door relay is activated. The Yellow LED is turned on while the alarm relay is activated. There are 5V voltage regulators distributes necessary power to Proximity Reader, Main CPU and other electronic circuitry.

Item	SSA-S2100	SSA-S2101	
User	10,000 / 20,000 Users (Selectable)		
Event Buffer	20,000 / 10,000 Event Buffers (Selectable)		
Power / Current	DC 12V / Max. 420mA		
Reader Port	1ea: 26bit Wiegand, 8bit Burst for PIN for Anti-Pass-Back	1ea: 34bit Wiegand, 8bit Burst for PIN for Anti-Pass-Back	
Reading Time (Card)	30ms		
Door Open Time	00-99 Sec. (Default 3Sec.)		
Communication	TCP/IP		
Baud Rate(bps)	9,600/ 19,200 / 38,400 / 57,600(selectable)		
Input Port	4ea : Exit Button, Door Sensor, Aux#1, Aux#2		
Output Port	2ea : 2 FORM-C Relay Output (COM, NO, NC) / DC12V-18V, Rating Max.2A		
	1ea : TTL Output / DC5V, Rating MAX.20mA		
	1ea : 26bit Wiegand Output Supported by TTL Output	1ea : 34bit Wiegand Output Supported by TTL Output	
LED Indicator	3 LED Indicators (Red, Green and Yellow)		
Beeper	Piezo Buzzer		
LCD	Graphic LCD (128 x 64 dots), 72.5mm x 39.5mm (2.85" x 1.56") View area		
Keypad	24 key Numeric Keypad with Back Lighting (12 Function Key included)		
LCD Display (Language)	English, Spanish, Portugal, Korean (Selectable)		
Voice Output (Language)	English (Default)		
Operating Temperature	0°C to +50°C		
Operating Humidity	10% to 90% relative humidity non-condensing		
Color / Material	Silver with Black / Polycarbonate		
Dimension (W x H x D(mm))	191.5 x 159.5 x 44.0		
Weight	710g		
RF Specifications	Frequency	125KHz	13.5605 MHz
	Modulation	PSK	ASK
	No. of Channels	1CH	1CH
	Output	Less than 65.80dBuA/m at a distance of 10m	Less than 47.544 mV/m at a distance of 10m