



STA IR1207E

Integrated RFID Reader



STA IR1207E Long Range Integrated RFID Reader is an updated RFID reader based on New Generation RFID Technology Platform; The STA IR1207E is an ultra-high frequency (UHF) EPC Gen2 reader that features mono-static antenna and RFID electronics circuit in-building together. This rugged STA IR1207E reader is housed in an ABS chassis and supports all cabling on one single side, making it ideal for physical restricted locations and / or locations with limited cabling and suitable for outdoor applications (The reader's Protection Grade is IP65).

The STA IR1207E, combined with ARM CORTEX M3 Professor, 16Kbits reader memory & 32Kbits Nonvolatile FRAM, as well as advanced UHF RFID electronics circuit, has richer features for different applications, and performs more safely and stably.

Features / Benefits

- **Longer reading distance . . .**
Up to 40 feet (12meters) between reader and tag
- **Compact, attractive reader . . .**
Single unit with inbuilt antenna, 17.32" x17.32" x 2.70"
- **Easy interfacing to control systems . . .**
Wiegand, RS232, RS485, Ethernet, Relay and I/O port data output
- **For outdoor applications . . .**
IP65 Protection Grade for rain and sun.
- **Complies with certifications . . .**
ISO-9001:2000, FCC Part 15, CE.

Applications:

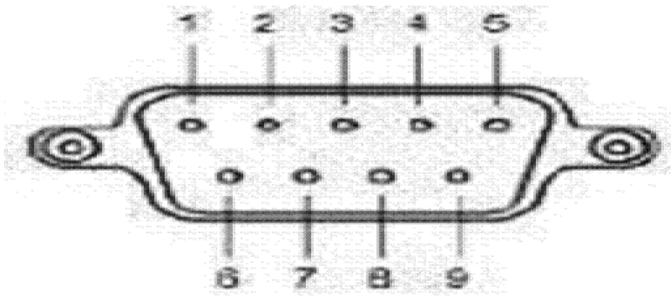
- Vehicle access control management
- Access Control applications
- identification and access for Supply Chain, Logistic, Retail, Warehouse, and manufacturing

SPECIFICATIONS

Model number	STA IR1207E
RFID	
Air Interface protocol	ISO 18000-6C (EPC Class 1 Gen 2) ISO18000-6B
Frequency Band	865MHz - 867MHz, and sub-bands
Channels	50 (only applicable to 902.5-927.5MHz frequency range)
Channel spacing	500KHz (Only applicable to 902.5-927.5MHz frequency range)
RF Power	0 to +31dBm
Receive Sensitivity	-80dBm
Antennas	Single unit with inbuilt antenna
HARDWARE AND FIRMWARE MANAGEMENT	
Processor	ARM CORTEX M3 100M
Memory	RAM 16Kbits + FRAM 32Kbits.
Reliable firmware upgrade	Web Management-based firmware upgrade capability; CommPort based firmware upgrade capability
API Support	.NET
CONNECTIVITY	
Communications	10/100 BaseT Ethernet (RJ45); RS-232 (DB9), RS-485, Wiegand, Relay output
GPIO	2 inputs, TTL compatible, 0-5V, 2 outputs, TTL compatible, 0-5V, 3channel relay output control 0-250V AC
Power Supply	+9V to +15V DC, external universal power supply with locking connector
ENVIRONMENTAL & PHYSICAL CHARACTERISTICS	
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Storage Temperature	-40°C to +80°C (-40°F to +176°F)
Humidity	5-95% non-condensing
Dimensions (L x W x D)	17.32x17.32x2.70 in (44 x 44 x 6.86cm)
Weight	5.0 lbs ± 0.04 lbs (2.3 kg ± 0.02 kg)
Housing Material	ABS chassis, meets IP65 standards
REGULATORY COMPLIANCE	
Certifications	FCC Part 15 regulations; CE certificate, following ETSI EN 302 208 v1.2.1 without LBT regulations.ISO-9001:2000

PIN Definitions

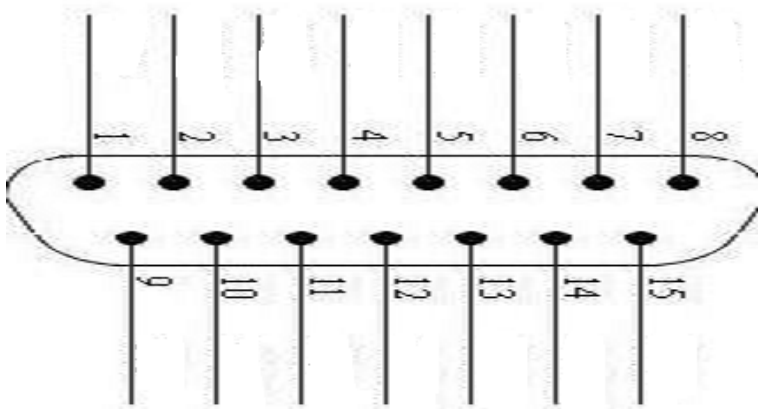
DB9 diagram



DB9 Definitions

Pin Number	Definition
1	N/A
2	RS-232 Output
3	RS-232 Input
4	N/A
5	GND
6	N/A
7	N/A
8	N/A
9	N/A

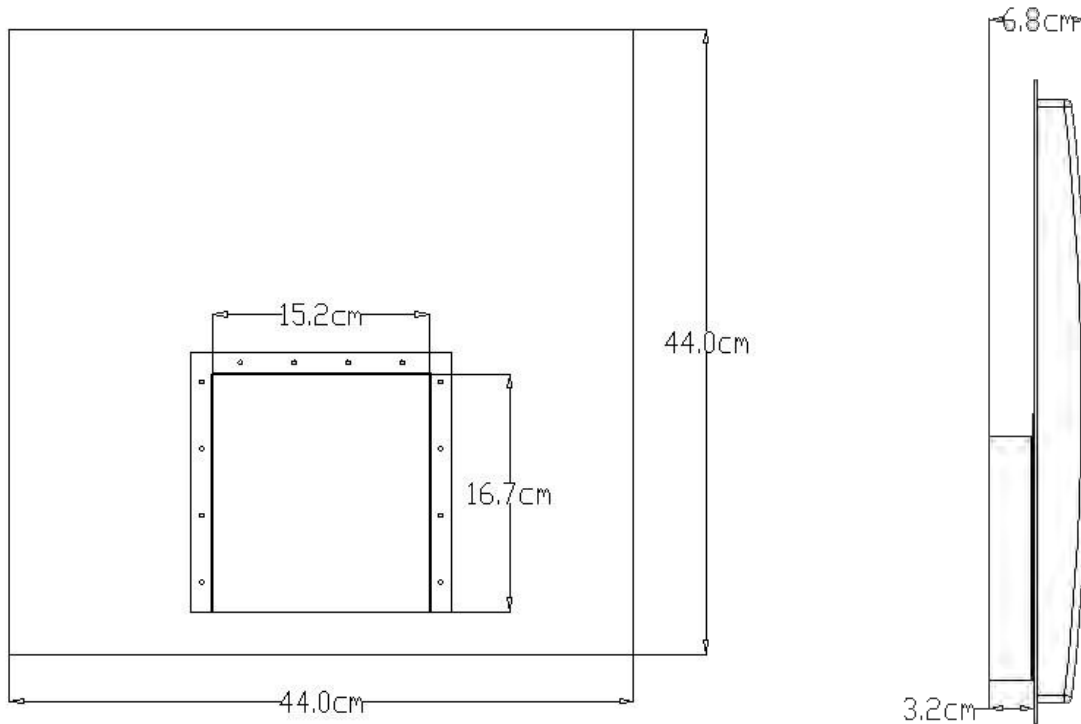
DB15 diagram



DB15 Definitions

Pin Number	Definition
1	GPIO Output
2	GPIO Output
3	GND
4	N/A
5	N/A
6	GND
7	GPIO Input
8	GPIO Input
9	GND
10	RS485 A+
11	RS485 B-
12	GND
13	Relay OFF (default)
14	Relay COM
15	Relay ON

Appearance & CAD Structure Chart



ACCESSORIES AND SUPPLIES

- Mounting bracket- Pan-and-tilt adjustable, for aiming the STA IR1207E reader at the tags' reading location.
- Power supply 12V 4A – Each STA IR1207E requires a separate, independent, dedicated power supply.
- Cable for power and data – Correct cable assures good reader performance

