



STA IR0207E

---- Desktop RFID Reader



STA IR0207E Desktop RFID Reader is an updated RFID reader based on New Generation RFID Technology Platform; The STA IR0207E is an ultra-high frequency (UHF) EPC Gen2 reader that features mono-static antenna with RFID electronics circuit in-building together. This rugged STA IR0207E 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 STA IR0207E, 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. The upgrade STA IR0207E reader is fully compatible with previous readers.

Features / Benefits

- **Long reading distance . . .**
Up to 10 feet (3 meters) ideal for Production Line installation
- **With reading range adjustable (0-3m)...**
Sensitive for tag Encoding
- **Compact, attractive reader . . .**
Single unit with inbuilt antenna, 6.1 x 4.2 x 1.1 inches (15.5 x 10.7 x 2.7cm)
- **Easy interfacing to control systems . . .**
Wiegand, RS232, RS485, Ethernet, Relay and I/O port data output
- **Complies with certifications . . .**
ISO-9001:2000, FCC Part 15, CE.

Applications:

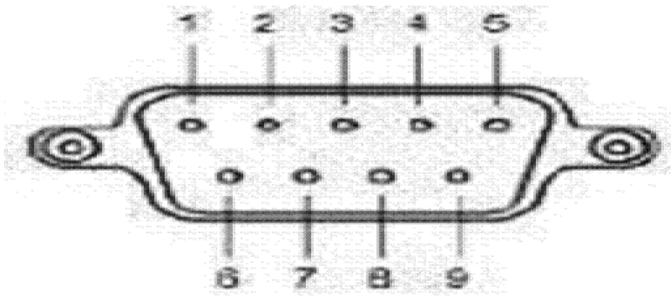
- Factory production line management
- Access control applications
- Identification and access for Supply Chain, Logistic, Retail, Warehouse, and Manufacturing

SPECIFICATIONS

Model number	STA IR0207E
RFID	
Air Interface protocol	ISO 18000-6C (EPC Class 1 Gen 2) ISO18000-6B
Frequency Band	902MHz - 928MHz, 865MHz - 867MHz, and sub-bands
Channels	50 (applicable to 902.5-927.5MHz frequency range)
Channel spacing	500KHz (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, Wiegand26 / 34, 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)	6.1 x 4.2 x 1.1in (15.5 x 10.7 x 2.7cm)
Weight	2.2 lbs ± 0.04 lbs (1 kg ± 0.02 kg)
Housing Material	ABS chassis
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

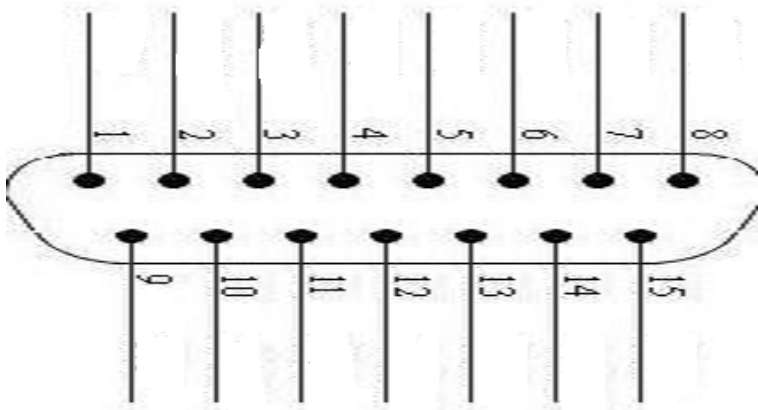
DB9 diagram



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

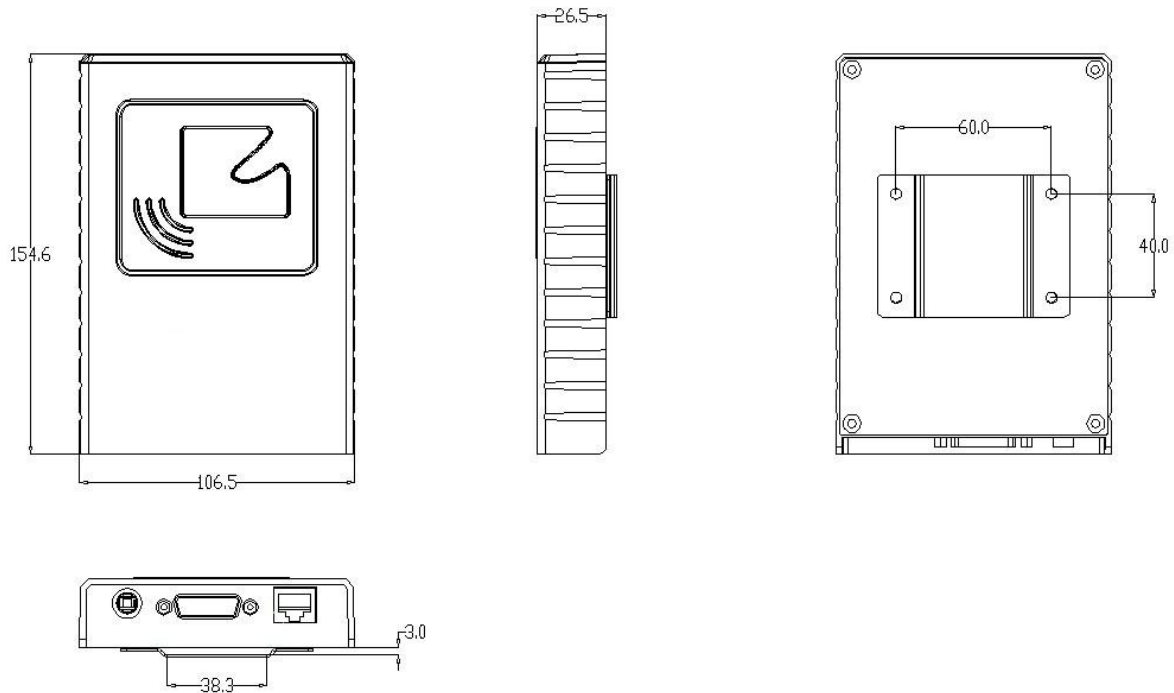
DB15 diagram



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;
- Power supply 12V 4A – Each STA IR0207E requires a separate, independent, dedicated power supply.
- Cable for power and data – Correct cable assures good reader performance

