



STA IR0507E

Integrated RFID Reader

STA IR0507E Middle-Range RFID Reader is a UHF tag and card reader used in RFID applications like gate access for vehicles, and physical access for items or people. This reader's electronics and antenna are integrated in a single compact enclosure. The STA IR0507E is optimally designed for Automatic Vehicle Identification (AVI) and Access Control applications such as parking facility gate control in a parking facility. It also provides identification and access for Supply Chain, Logistic, Retail, Warehouse, and manufacturing. The STA IR0507E Reader assures security by the usage of RFID reader encryption for communications between the reader and UHF vehicle cards or tags.

FEATURES

- Longer reading distance . . .
Up to 26 feet (8 meters) between reader and tag
- Small, attractive reader . . .
Single unit with inbuilt antenna, 11 x 11 x 2.70 inches (28 x 28 x 6.85cm)
- with reader memory...
16Kbits reader memory and 32Kbits Nonvolatile FRAM ensure data safety
- Unlimited tag or card life . . .
Passive battery-free credentials
- Data output to fit the system . . .
Selectable read repeat rate and output.
- Fast reading rate...
200 tags per second, and 3000 reading times per minute.
- Easy interfacing to control systems . . .
Wiegand, RS232, RS485, Ethernet, Relay data output
- Complies with certifications . . .
ISO-9001:2000; FCC Part 15; CE
- Eliminates stop-and-wait entry . . .
Cars continue moving past reader
- For outdoor applications . . .
IP65 Protection Grade for rain and sun.



The STA IR0507E reader is suitable for outdoor applications (The reader's Protection Grade is IP65). The STA IR0507E Reader with Relay output can connect directly to the vehicle access control barrier for the simple Car Parking system to save the cost.

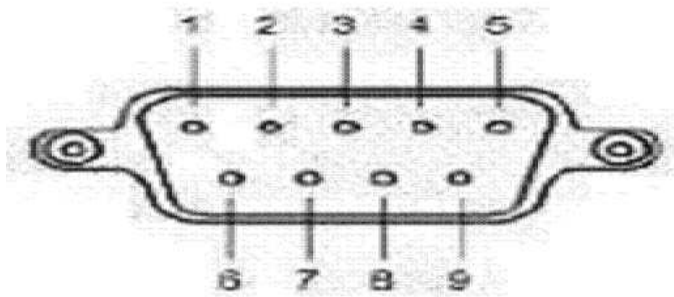
The STA IR0507E reader operates in the license-free 902-928 MHz or 865-867MHz UHF band. It combines effective UHF technology with economical passive tags and cards, and simultaneous Wiegand, RS-232, RS485, Ethernet, Relay data outputs. It can be interfaced with all standard access and AVI systems. The reader is manufactured in an ISO-9001 certified factory assuring the highest quality standard. The STA IR0507E reader offers an impressive combination of single unit construction, small size, and attractive appearance. Tag reading distance is commonly up to 30 feet and sometimes more, depending on Tag/card type, reader mounting, and environment.

SPECIFICATIONS

Model number	STA IR0507E
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, 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°C to +140°C)
Storage Temperature	-40°C to +80°C (-40°C to +176°C)
Humidity	5-95% non-condensing
Dimensions (L x W x D)	11 x 11 x 2.70 in (28 x 28 x 6.85cm)
Weight	3.3 lbs ± 0.04 lbs (1.5 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

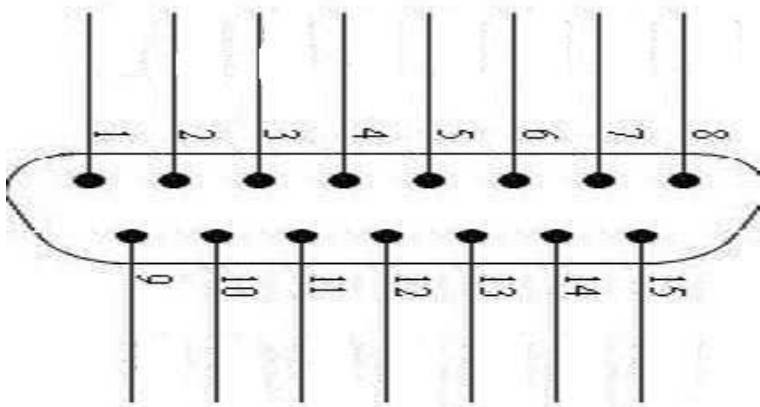
DB9 diagram



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

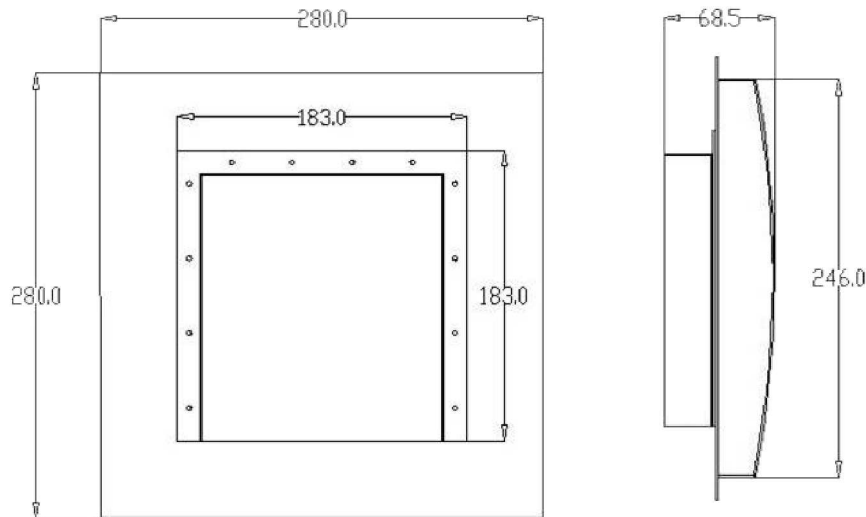


DB15 Definitions

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 & CA

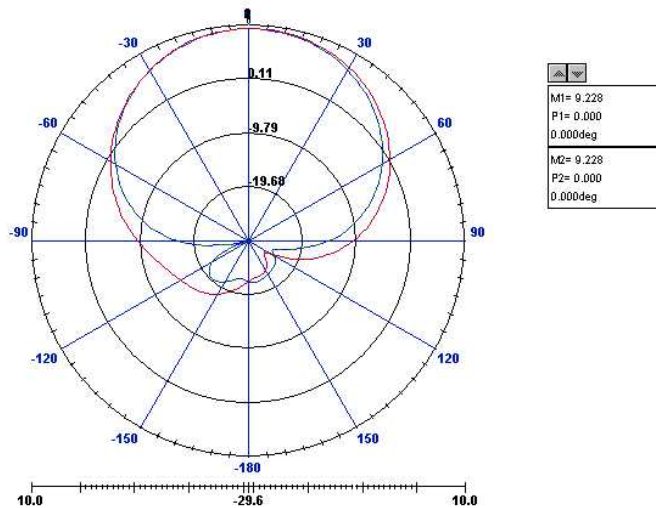
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09 Apr 2011

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ACCESSORIES AND SUPPLIES

Mounting bracket- Pan-and-tilt adjustable, for aiming the IR0507E reader at the tags' reading location

Power supply 12V 3A – Each IR0507E requires a separate, independent, dedicated power supply.

- Cable for power and data – Correct cable assures good reader performance

