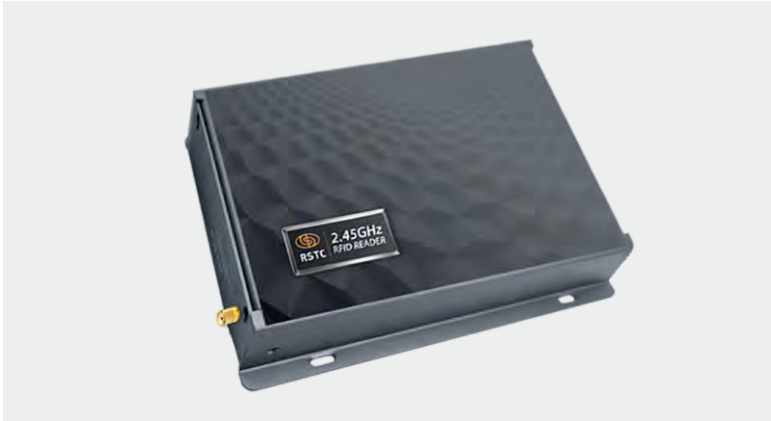




# RS-AR01

2.45GHz Omni-Directional Active RFID Fixed Reader

## RS-AR01 2.45GHz Omni-Directional Active RFID Fixed Reader



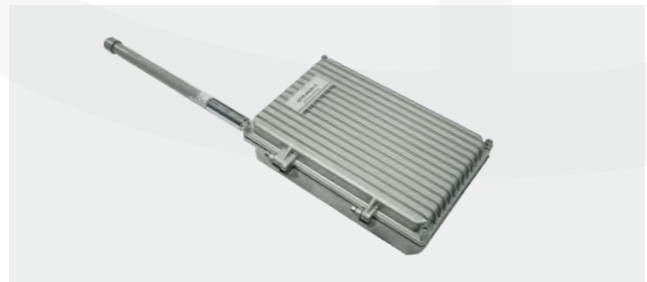
2.45GHz series omni-directional active RFID readers have the characteristics of wide coverage, long reading distance, fast reading speed, high reading rate, high reliability, and strong expandability. The device has built-in reading distance adjustment control and RSSI tag signal intensity detection circuit.

The reading distance can be controlled by software within the range of 0-180 meters. The product is suitable for applications with obstruction and reading distance greater than 10 meters, such as open area access control, industrial signal identification, personnel positioning, attendance management, goods management and monitoring, manufacturing management, transportation management and other application systems.

### Features

- Private Protocol
- Range Adjustable by Software
- Reading Radius 0-180m in Open Area
- Support RS-232, Ethernet Communication Ports
- Support GPIO
- C#/C++ API Supported

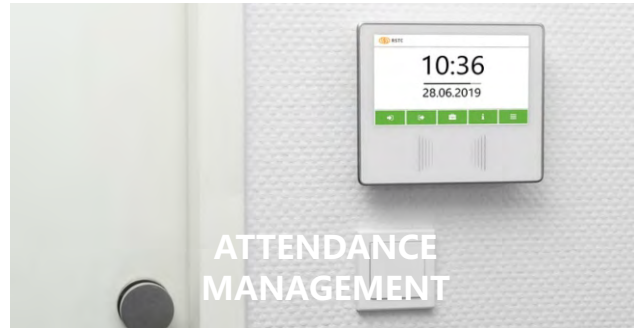
### Installation Diagram (Waterproof Housing)



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## Application



## On Site Installation Diagram



# RS-AR01 2.45GHz Omni-Directional Active RFID Fixed Reader

## Specification

RF Parameters	
Operating Frequency	ISM band 2.4-2.48GHz
Power Output	Maximum output + 15dBm, built-in 30db power attenuator, stepped -2db, software controllable
Receive Sensitivity	-93dBm
Label Signal Strength Indication (RSSI)	-50dBm- -80 dBm, accuracy $\pm$ 1dB (customized)
Antenna	External antenna, standard configuration 3dbi omnidirectional whip antenna, can be customized according to the actual application
Communication Interface	
Communication Interface	RS-232 interface, 10 / 100M adaptive Ethernet
Communication Expansion Interface	RS-485 interface or Wiegand 26/34 interface (customized)
GPIO Interface	2 optical isolation inputs (5V, <20mA); 2 relay control outputs (30V, <1000mA)
Firmware Upgrade	Supports online serial port upgrade through dedicated upgrade software
Application Software Interface	Provides API development kit and C ++, C # application routines
Tag Operation	
Supporting Tag Protocol	Enterprise private protocol, can be customized development according to customer agreement
Supporting Tag Working Mode	Support active and passive active tags
Tag Reading Distance	0 ~ 180 meters (outdoor line of sight distance test, actual reading distance depends on antenna type, environment, tag type)
Number of Identification Tags	200 tags / second (Ethernet connection test)
Anti-collision Handling	1000 tags
Mechanical and Electrical Properties	
Dimensions	190.5mm×148mm×32mm (without antenna)
Weight	460g (without antenna)
Power Supply	220V AC input, DC 5V / 2A output power converter
Power Loading	200mw standby, 400mW working
Working Temperature	-40°C~+60°C
Storage Temperature	-60°C~+80°C
Operating Humidity	5% ~ 95% (non-condensing)
Water/Dust-proof Rating	IP54 (If using a waterproof housing, can reach IP65)
Vibration	10~500Hz, 100mm/15g, three axis
Installation Method	Desktop or wall mounted



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