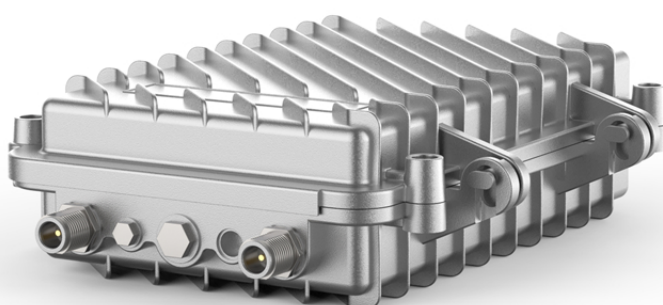# JT-R2430A

2.4GHz RFID Outdoor Omnidirectional Active Reader

JT-R2430A is a self-developed high-performance 2.4G active tag fixed reader. Have a complete independent intellectual property rights, the default operating frequency band of the reader is 2.45GHz, which has strong multi-tag recognition ability, the card reading distance is longer than other frequency band, the protection grade uo to IP65, the installation and configuration are convenient.

SPECIFICATION

RFID Parameters

Frequency	2.4GHz~2.45GHz
Protocol	ISO18000-4-2015
Identify direction	Omnidirectional
Recognition speed	200km/h
IP grade	IP65
Communicate interface	RS232/RS485/RJ45;4G/WiFi(optional)
2.4G RFID antenna interface	50ohm N-type(Female)
4G-LTE antenna interface	50ohm N-type(Female)
GNSS antenna interface	50ohm N-type(Female)
2.4G WiFi antenna interface	50ohm SMA
Power supply	10~60V(Optional POE power supply)
Working current	0.15A@12V,25°C
I/O	2-way trigger input, 2-way relay output (optional)
SDK	DEMO&C++,C#,JAVA,Android SDK

Use Environment

Operating Temp.	-20°C~+75°C
Storage Temp.	-40°C~+85°C
Humidity	5-90% non-condensing (+25° C)

Physical Parameters

Shell material	Die-cast aluminum
Dimensions	230.6(L)*164(W)*72(H)mm
Net weight	1.2kg

RFID Performance Parameters

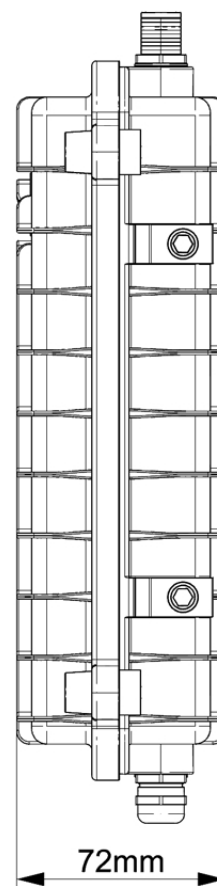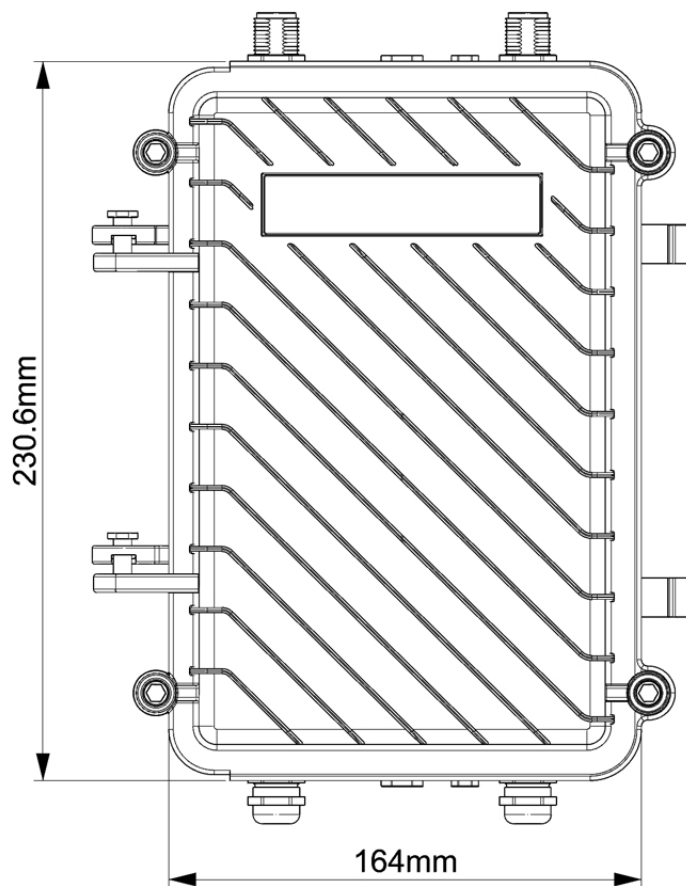|	
Communication rate	1Mbps(default);2Mbps(optional)
Transmit power	4dBm Max(adjustable)
Modulation	GFSK
frequency deviation	±170KHz @ 1Mbps Data Rate
Transmit power accuracy	±4dB
Adjacent channel rejection ratio — 1st Channel	-25dBc @1Mbps Data Rate
Adjacent channel rejection ratio — 2nd Channel	-50dBc @1Mbps Data Rate
Receive sensitivity	-90dBm (1Mbps Data Rate, SPEEDWORK tag packet protocol length 10-bytes,BER «1E-04)
Receive carrier-to-noise ratio selectivity	9dB (1Mbps Data Rate, Co-Channel Interference)
RSSI receiving accuracy	±2dB
Effective range of RSSI reception	-90 ~ -20dBm
RSSI resolution	±1dB
Anti-collision tag reader	»200(In Co-Channel mode, RS232, RS485,RJ45, WiFi, 4G tag reader; test site: open and unobstructed area)
Secure Encryption	Supporting AES-128b/192b/256b
Reading distance	Up to 150m(Test Conditions: 1. External 6dBi omnidirectional glue stick antenna; 2. Test with JT-T2450A 3. Test in an open field without obstacles

GNSS

GPS L1	1575.42±1.023MHz
GLONASS	1597.5~1605.9 MHz
BDS	1559.1~1563.1 MHz
Capture sensitivity	-147dBm
Tracking sensitivity	-160dBm
Positioning accuracy	<3m(open environment)
Update frequency	<10Hz
Noise figure	3dB

4G-LTE

LTE FDD		B1, B3, B5, B8
LTE TDD		B34, B39, B40, B41
GSM/GPRS		900/1800 MHz
	GPRS	Max 85.6Kbps(DL) / Max 85.6Kbps(UL)
	LTE-FDD	Cat1, Max 10Mbps(DL)/Max 5Mbps(UL)
	LTE-TDD	Cat1, Max 8.96Mbps(DL)/Max 2Mbps(UL)
	GSM850	+33dBm (Power Class 4)
	EGSM900	+33dBm (Power Class 4)
	DCS1800	+30dBm (Power Class 1)
	PCS1900	+30dBm (Power Class 1)
	LTE	+23dBm(Power Class 3)

DIMENSIONS

230.6mm

164mm

72mm

SPEEDWORK