



WLS-RS300

Wireless Locating System Receiver (RoHs)

■ Features

- Supports data conversion from ISM 2.4GHz frequency to 400MHz frequency
- Supports 16 segments of RF channels with 2.4GHz and 400MHz
- Built in 2.4GHz 3dBi PCB directional antenna
- ESD Protection: +/- 4 kV for contact terminal
- Isolation: 3000 VDC for DC-to-DC, 2500 Vrms using a photocoupler
- Relay Output for Alarm Device





Introduction

WLS-RS300 is a 2.4GHz wireless receiver, it is mainly installed in fixed position to receive the 2.4GHz wireless location data of WLS-T01, WLS-T02 and WLS-T11 broadcast. In the other hand, WLS-RS300 is also a wireless converter (called Router) from 2.4GHz to 400MHz. it can effectively use 400MHz high transmittance characteristics to extend the wireless transmission distance, and don't need add wire between the communication paths. The WLS software in the PC can use transparent function of RFU-400 to poll the wireless location data of WLS-RS300, and then calculate the relative position by the algorithm.

The user can simply use the DIP switch and rotation switch to configure the parameter, and don't need to add wire between the communication paths, that can speed up to build the system, and reduce the cost, so it very suitable for use in item tracking, personnel movements, factory regional management and other applications.

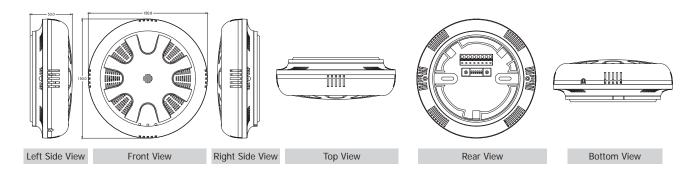
■ System Specifications

Model		
Wireless		
2.4GHz	Modulation	OQPSK (Offset Quadrature Phase-shift Keying)
	Spread Spectrum	DSSS (Direct-Sequence Spread Spectrum)
	RF Channels	16
	Transmission Power	16±1dBm (Default) / 17dBm (Max.)
	Wireless frequency	2.4GHz
	Antenna	2.4GHz - 3dBi PCB directional antenna
	Transmission Range (Line of Sight, LOS)	100m (Default)
	Number of tags supported	90 (Max., Tag Tx interval is 3 seconds)
400MHz	RF Channels	16
	Transmission Power	19dBm (Default / Max.)
	Wireless frequency	Channel 0~9: 429.8125 MHz ~ 429.9250 MHz Channel A~F: 429.1750 MHz ~ 429.2375 MHz
10011112	Antenna	429MHz – 5dBi PCB directional antenna
	Transmission Range (Line of Sight, LOS)	160m(Default)
	Range of address	1~255 (0x01~0xFF)
LED Indi	cators	
Power		1 LED, Red
400MHz Transmitted status		1 LED, Green
2.4GHz Received status		1 LED, Green

Model					
LED Indicator					
PWR	Red x 1				
RF_Tx	Green X 1				
RF_Rx	Yellow x 1				
Power					
Required Supply Voltage	100 VAC ~ 240VAC				
Power Consumption	5 W Max.				
Mechanical					
Dimensions (D x H)	Ø 150 mm x 53 mm				
Max. Load Current	Ceiling /surface mounted				
Relay Output					
Channels	1 (SPDT, Form C)				
Installation	250 VAC @ 6 A or 30 VDC @ 6 A				
Alarm					
Buzzer volume	Min. 85dBA(Typical 92)@10cm				
Temperature Measuremen	t				
Range	0°C ~ +50°C				
Resolution	0.1°C				
Accuracy	±5% RH				
Relative Humidity Measurement					
Range	0 to 100% RH				
Resolution	0.1% RH				
Accuracy	10 ~ 90% RH, Non-condensing				
Environment					
Operating Temperature	0°C ~ +50°C				
Storage Temperature	-30°C ~ +75°C				
Relative Humidity	10 ~ 90% RH, Non-condensing				

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■ Dimensions (Units: mm)



■ Ordering Information

WLS-RS300 CR	Ceiling Mounting Type Wireless Locating System Receiver with Alarm, Relay and T&H Sensor (RoHs)
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Accessories

WLS-T01 CR	Battery Standard Type Wireless Locating System Transmitter with Help Button (RoHs)
WLS-T02 CR	Battery Standard Type Wireless Locating System Transmitter with the Buzzer (RoHs)
WLS-T11 CR	Rechargeable Card Type Wireless Locating System Transmitter with Help Button (RoHs)
RFU-400 CR	RS-232 / RS-485 to 429 MHz Radio Modem (RoHS)

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