



# iStation

Rainfall



# Rain Sensor

## LoRaWan

### Product Description

- Rainfall sensor
- High quality ABS material
- Diameter of rain guage cylinder: phi 200mm
- Measurement accuracy: 0.2mm
- Permissible current: 20mA
- Working environment temperature: - 40°C - 70°C
- Built-in level, double reed tube
- Small size, easy to install, High precision and good stability
- Good linearity, long transmission distance and strong anti-interference ability
- A mesh is designed at the funnel to prevent debris, such as leaves, from blocking rainfall
- Anti - insect, anti - sand, anti - blocking water, can be corresponding to all kinds of bad weather
- Strong corrosion resistance, long service life, can adapt to a variety of environments
- ABS economic benefits, cost-effective
- Cross-threshold report, plus periodic report every 2 hours (the threshold and the periodic report cycle are both user-configurable)
- OTA (Over The Air) firmware upgrade, including to upgrade loader and application images
- Analogue and digital interface for external sensor connectivity and pulse counting (MPI)
- Low power consumption, 5 – 10 years of battery operational life with 2 x AA Li-SOCI2 Battery
- Optional DC 5V power source
- Integrated internal antenna, or optional external SMA/IPEX antenna
- Up to 5km reach in NLoS (Non-Line-of-Sight) and up to 18km LoS (Line-of-Sight) environments
- IP67 enclosure rating



### Installation Guide

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#### On the ground



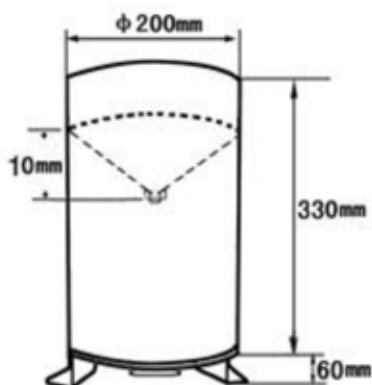
#### Rack Mount



## Specifications

PARAMETER	VALUE
<b>SENSOR</b>	
Material	High quality ABS
Diameter of Rain Gauge Cylinder	φ 200mm
Measurement Accuracy	0.2mm
Current License	20mA
Output Signal	Double reed tube on and off (built-in filter circuit, level meter)
Working Environment Temperature	-40°C - 70°C
Storage Temperature Range	-40°C - 70°C
Data Report	Cross-threshold report, plus periodic report every 2 hours (the threshold and the periodic report cycle are both user-configurable)
<b>WIRELESS</b>	
ISM Band	EU 863 – 870MHz, US 902 – 928MHz China 779 – 787MHz, EU 433MHz AS 923MHz, CN 470 – 510MHz
Maximum Link Budget	168dB
Distance	Up to 5km NLOS, up to 18km LOS
Antenna	Integrated internal antenna or external 1/2 wavelength whip antenna (SMA)
<b>Mechanical</b>	
Dimension	60mm x 100mm x 30mm (WxS8800)
IP Rating	IP67 (WxS8800)
Operating Temperature	-40°C to +85°C (WxS8800)
Cable Length	0.5 meters
Total Weight	120g
<b>ELECTRICAL</b>	
SUPPLY VOLTAGE	3.0 – 3.8 VDC
Power Type	Replaceable 1 or 2 AA 3.6V Li-SOCI2 Battery; DC 4.5V – 12V optional
Battery Life	5 – 10 years (assume one motion event one day)
<b>COMPLIANCE/CERTIFICATION</b>	
	LoRaWAN 1.0.2
	FCC (America): 2A07W-WXS8000, IC (Canada): 23701-WXS8000 CE (European Union): B1810246 ROHS (European Union): R2BJ180927F0664E

## Measurements





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