CR100



Communication Box/LoRa Wan

Description

The CR100 is responsible for receiving sensor data from any sensor station , receiving geographic coordinates (Every 24 hours) and sending it to the server via the LoRaWAN protocol.



Specifications	
Hardware Specification	Processor: ST (L Series) LoRaWAN Chipset: Semtech
	GPS Chipset: Qualcomm
Connectors	4 Pin: Programmer Connector , 6 Pin: communication bus
	SMA Connector(Left, Top view): GPS Antenna
	SMA Connector(Right, Top view): LoRaWAN Antenna
Working Environment	Operating Temperature : -40°C ~ 85°C
	Storage Temperature: -40°C ~ 85°C
	Operating humidity: 0 ~ 100%
Processor Specification	Arm® 32-bit Cortex®-M0+ with MPU – From 32 kHz up to 32 MHz max. ,0.95 DMIPS/MHz Ultra low power
LoRaWAN Specification	Frequency: 433 MHz and 868 MHz
	TX Power: Adjustable up to +14 dBm
	High Receiver Sensitivity: Down to -146 dBm
	Bitrate: up to 10937 bps
GPS Specification	Support: GPS, GLONASS, BeiDou, Galileo and QZSS
	Ultra low power consumption
	Tracking Sensitivity: -165dbm
Battery Specification	Nominal capacity: 13.0 Ah
	Nominal Voltage: 3.6 V (at 2 mA +20°C)
	self-discharge rate: less than 3% after 1 year of storage at +20°C
	Maximum recommended continuous current: 1800 mA
Power	Input Universal Range 3.3-3.7 DC (Li-ion Battery)
Power Consumption	<500mW
Case	Waterproof (IP67) with military Connectors
Physical Features	75*125*110 mm

