

Features of Cattle Tracker Tag



- Cattle RFID and tracking tag
- Server can based on RSSI data to position cattle based on our patented Smart Positioning using RSSI fingerprints
- Solar panel to provide continuous charging for internal battery
- Provide periodic battery status messages to server
- Battery operated for two years based on normal use
- Activation switches via magnet
- High sensitivity: down to -142.5 dBm
- Option support for 868 MHz & 902 – 928 MHz
- Operating temperature -10°C to +50°C

This Cattle Tracker Tag is designed to contain an RFID for cattle identification and also LoRa transmission for network server to position that particular cattle based on RSSI data from receiving gateways. Internal battery can sustain continuous LoRa transmission every 15 minutes for 1 day without charging. Each tag is equipped with solar panel to keep charging and replenish the battery for continuous operation. Every 15 minutes, the tag will report battery status to a LoRa network. Based on the RSSI data from the group of gateways that receive the same message, the LoRa server can position the tag either by our patented Smart Positioning using RSSI fingerprint or by trilateration.

Specification

Wireless Frequency Band	902 - 928 MHz ISM (Option support for European band 868 MHz)		
Number of Channels	Configurable up to 64 channels; node will select available channel to send data		
Power Supply	Solar panel to charge internal battery		
Transmit Power	+18.9 dBm	Receive Sensitivity	Up to -142.5 dBm
Operating Temperature	-10°C to 50°C	Modulation	Based on LoRa
Weight	~ 40 grams	Dimension	
Protection Requirements	IP68	Certification	FCC Pending