

# LoRaWAN Leaf Moisture Sensor

## LLMS01



## OVERVIEW:

The Dragino LLMS01 is a **LoRaWAN Leaf Moisture Sensor** for IoT of Agriculture. It is designed to measure **the leaf moisture** and **temperature**, so to send to the platform to analyze the leaf status such as watering, moisturizing, dew, frozen. The probe is IP67 waterproof.

LLMS01 detects leaf's moisture and temperature use FDR method, it senses the dielectric constant cause by liquid over the leaf surface, and cover the value to leaf moisture. The probe is **design in a leaf shape to best simulate** the real leaf characterizes. The probe has as density as **15 leaf vein lines per centimeter** which make it can senses small drop and more accuracy.

The LoRa wireless technology used in LLMS01 allows device to send data and reach extremely long ranges at low data-rates. It provides ultra-long range spread spectrum communication and high interference immunity whilst minimizing current consumption.

LLMS01 is powered by **8500mAh Li-SOCI2 battery**, it is designed for long term use up to 5 years.

Each LLMS01 is pre-load with a set of unique keys for LoRaWAN registrations, register these keys to local LoRaWAN server and it will auto connect after power on.

### Features:

- LoRaWAN 1.0.3 Class A
- Ultra-low power consumption
- Monitor Leaf moisture
- Monitor Leaf temperature
- Monitor Battery Level
- Bands: CN470/EU433/KR920/US915/EU868/AS923/AU915/IN865
- AT Commands to change parameters
- Uplink on periodically
- Downlink to change configure
- IP66 Waterproof Enclosure
- IP67 rate for the Sensor Probe
- 8500mAh Battery for long term use

### Applications:

- Smart Agriculture

### Order Info- LLMS01-XX

XX:

- XX: Frequency Bands, options:  
AS923,AU915,EU433,EU868,KR920  
US915,IN865,CN470