

# LoRaWAN Soil pH Sensor

## LSPH01





### **OVERVIEW:**

The Dragino LSPH01 is a LoRaWAN Soil pH Sensor for IoT of Agriculture. It is designed to measure the soil PH and soil temperature, so to send to the platform to analyze the soil acid or alkali level. The probe is IP68 waterproof.

LSPH01 probe is made by Solid AgCl reference electrode and Pure metal pH sensitive electrode. It can detect soil's pH with high accuracy and stable value. The LSPH01 probe can be buried into soil for long time use.

The LoRa wireless technology used in LSPH01 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.

LSPH01 is powered by 8500mAh Li-SOCI2 battery, it is designed for long term use up to 5 years.

Each LSPH01 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 v1.0.3 Class A
- Ultra-low power consumption
- Monitor soil pH with temperature compensation
- Monitor soil temperature
- Monitor Battery Level
- Support pH calibration by end user
- Bands: CN470/EU433/KR920/US915/EU868/ AS923/AU915/IN865
- AT Commands to change parameters
- Uplink on periodically
- Downlink to change configure
- IP66 Waterproof Enclosure
- IP68 rate for the Sensor Probe
- 8500mAh Battery for long term use

### Applications:

• Smart Agriculture

#### Order Info-LSPH01-XX

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

### **Dragino Technology Co., Limited**