

# LoRaWAN Soil NPK Sensor

## LSNPK01



## OVERVIEW:

The Dragino LSNPK01 is a **LoRaWAN Soil NPK Sensor** for IoT of Agriculture. It is designed to measure the Soil Fertility Nutrient and provide a plant growing reference. The probe is IP68 waterproof and can be buried into soil for long term use.

LSNPK01 detects soil's **Nitrogen, Phosphorus, and Potassium** use TDR method, and uploads these values via wireless to LoRaWAN IoT Server.

The LoRa wireless technology used in LSNPK01 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.

LSNPK01 is powered by **8500mAh Li-SOCI2 battery**, it is designed for long term use up to 5 years.

Each LSNPK01 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 Nitrogen
- Monitor Soil Phosphorus
- Monitor Soil Potassium
- 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
- IP68 rate for the Sensor Probe
- 8500mAh Battery for long term use

### Applications:

- Smart Buildings & Home Automation
- Logistics and Supply Chain Management
- Smart Metering
- Smart Agriculture
- Smart Cities
- Smart Factory

### Order Info- LDS02-XX

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