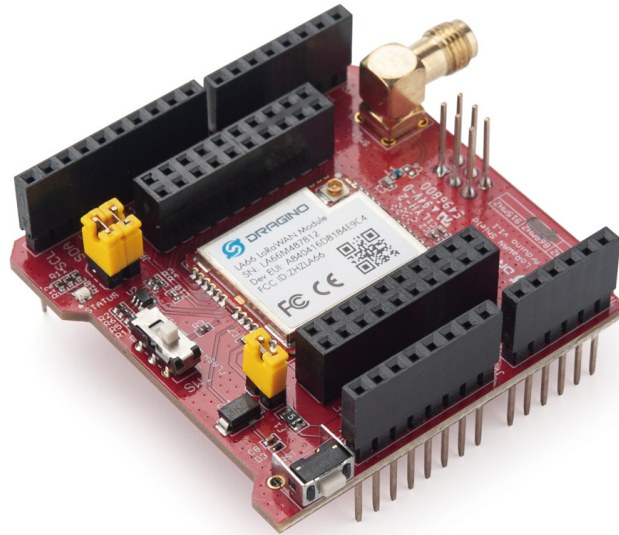# LoRaWAN Shield

LA66 LoRaWAN Shield

OVERVIEW:

LA66 LoRaWAN Shield is the Arduino shield base on LA66. Users can use LA66 LoRaWAN Shield to rapidly add LoRaWAN or peer-to-peer LoRa wireless function to Arduino projects.

LA66 is a ready-to-use module that includes the LoRaWAN v1.0.3 protocol. The LoRaWAN stack used in LA66 is used in more than 1 million LoRaWAN End Devices deployed world widely. This mature LoRaWAN stack greatly reduces the risk to make stable LoRaWAN Sensors to support different LoRaWAN servers and different countries' standards. External MCU can use AT command to call LA66 and start to transmit data via the LoRaWAN protocol.

Each LA66 module includes a world-unique OTAA key for LoRaWAN registration.

Besides the support of the LoRaWAN protocol, LA66 also supports open-source peer-to-peer LoRa Protocol for the none-LoRaWAN application.

LA66 is equipped with TCXO crystal which ensures the module can achieve stable performance in extreme temperatures.

Features:

- SMA connector
- Ultra-long RF range
- Support peer-to-peer protocol
- World-wide unique OTAA keys.
- Support LoRaWAN v1.0.3 protocol
- AT Command via UART-TTL interface
- Firmware upgradable via UART interface
- Arduino Shield base on LA66 LoRaWAN module
- Available in different frequency LoRaWAN frequency bands.
- TCXO crystal to ensure RF performance on low temperature

Specifications:

- CPU: 32-bit 48 MHz
- Flash: 256KB
- RAM: 64KB
- LoRa Rx current: <9 mA
- I/O Voltage: 3.3v
- Input Power Range: 1.8v ~ 3.7v
- Power Consumption: < 4uA.
- High sensitivity: -148 dBm
- LoRa Tx Current: <90 mA at +17 dBm, 108 mA at +22 dBm
- Frequency Range: 150 MHz ~ 960 MHz
- Maximum Power +22 dBm constant RF output
- Temperature:
  - Storage: -55 ~ +125℃
  - Operating: -40 ~ +85℃
- Humidity:
  - Storage: 5 ~ 95% (Non-Condensing)
  - Operating: 10 ~ 95% (Non-Condensing)

Order Info:

Part Number: LA66-LoRaWAN-Shield-XXX

- XXX: Frequency Bands, options: EU433, CN470,EU868,IN865,KR920,AS923,AU915, US915,PP(Peer to Peer LoRa Protocol)