

SENSOR NODE

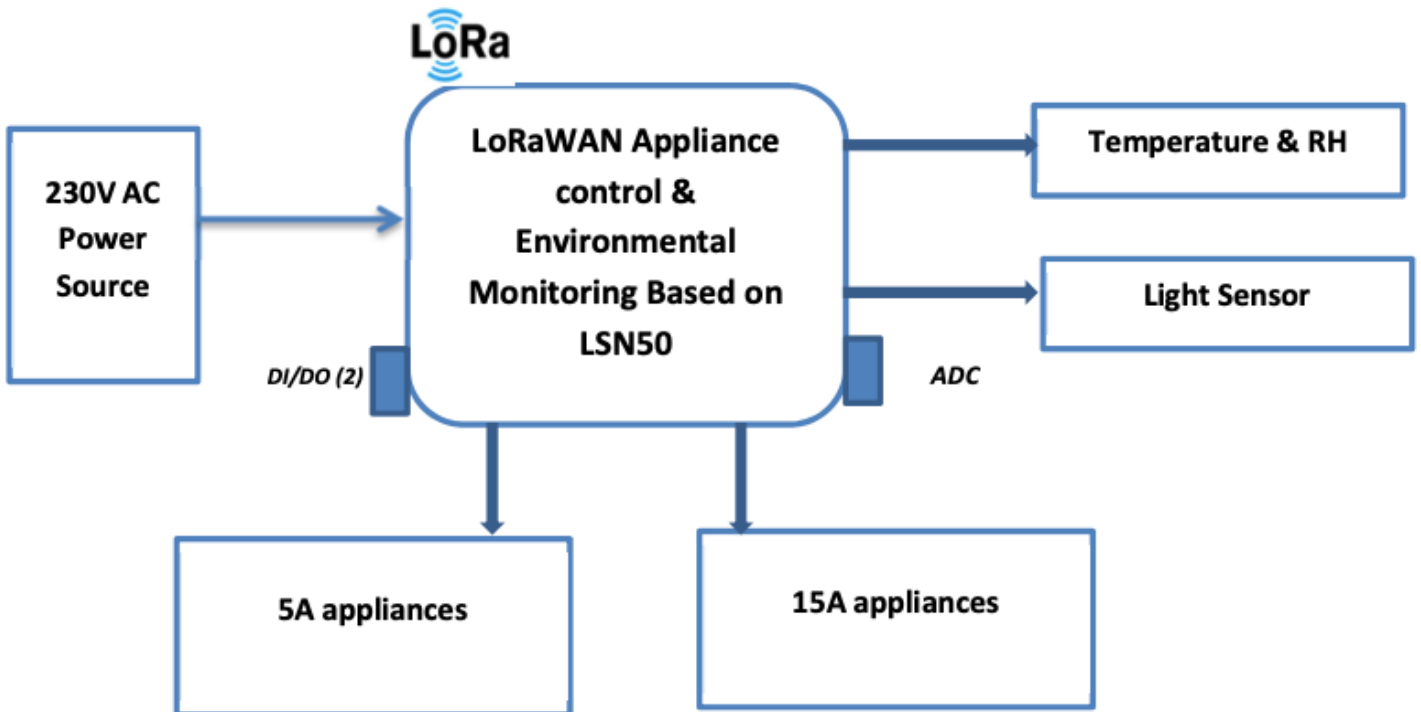
LSN50v2 is a Long Range LoRaWAN Sensor Node. It is designed for outdoor use and powered by Li/SOCl₂ battery for long term use, power consumption and secure data transmission. It is designed to facilitate developers to rapidly deploy industrial level LoRaWAN and IoT solutions. LSN50 v2 helps users to turn the idea into a practical application and make the Internet of Things a reality. It is easy to program, create and connect your things everywhere. LSN50v2 is based on SX1276/SX1278 allows the user 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 minimising current consumption. It targets professional wireless sensor network applications such as irrigation systems, smart metering, smart cities, smartphone detection, building automation, and so on.

SPECIFICATIONS :

- STM32L072CZT6 MCU
- SX1276/78 Wireless Chip
- Pre-load bootloader on USART1/USART2
- MDK-ARM Version 5.24a IDE
- I2C, LPUSART1, USB
- 2x12bit ADC, 1x12bit DAC
- 18xDigital I/Os
- LoRa™ Modem
- Preamble detection
- Baud rate configurable
- CN470/EU433/KR920/US915
- EU868/AS923/AU915
- Open source hardware / software
- Available Band: 433/868/915/920 Mhz
- IP68 Waterproof Enclosure
- Ultra Low Power consumption
- AT Commands to change parameters
- Power Options: AC Powered / 4000mah battery for long term use



SYSTEM ARCHITECTURE



SPECIFICATIONS :

- Ambient Temperature measurement
- Relative Humidity measurement via probe (2 meters)
- Light intensity measurement via probe (2 meters)
- ADC channel * 2
- Digital Input/output * 2
- LoRaWAN
- Power supply to node via 230 V AC
- Switching ON/OFF of appliances to be done from our applications
- Option to connect appliances with 5A & 15 A
- Configuration (control logic)via LoRaWAN downlink commands
- IP67 enclosure
- Notification RGB LED