

## TEMPERATURE & HUMIDITY SENSOR

SHT3x-DIS is the next generation of temperature and humidity sensors. The SHT3x-DIS has increased intelligence, reliability and improved accuracy specifications compared to its predecessor. Its functionality includes enhanced signal processing, two distinctive and user selectable I2C addresses and communication speeds of up to 1 MHz. The DFN package has a footprint of 2.5 x 2.5 mm<sup>2</sup> while keeping a height of 0.9 mm. This allows for integration of the SHT3x-DIS into a great variety of applications. Additionally, the wide supply voltage range of 2.4 V to 5.5 V guarantees compatibility with diverse assembly situations.



### **SPECIFICATIONS :**

- Fully calibrated, linearized, and temperature compensated digital output
- Wide supply voltage range, from 2.4 V to 5.5 V
- I2C Interface with communication speeds up to 1MHz and two user selectable addresses
- Typical accuracy of  $\pm 1.5$  % RH and  $\pm 0.2$  °C for SHT35
- Very fast start-up and measurement time
- Tiny 8-Pin DFN package

## **SENSOR NODE**

LSN50v2 is a Long Range LoRaWAN Sensor Node. It is designed for outdoor use and powered by Li/SOCl<sub>2</sub> 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
- 4000mAh Battery for long term use

