Actual footprint



New ultra-compact, low-cost standalone LoRa module

## Murata CMWX1ZZABZ-078 module

New, compact, low-cost, low-powerwide- area-network (LPWAN) wireless module that supports the LoRaWAN long range wireless protocol

- 12.5 x 11.6 x 1.76 mm metal shielded package
- Comprises a Semtech SX1276 ultra long range spread spectrum wireless transceiver and an STMicro STM32L0 series ARM Cortex M0+ 32 bit microcontroller (MCU)
- Communication with the module can be achieved via UART, SPI, or I<sup>2</sup>C peripheral interfaces
- Includes 192kB flash and 20kB RAM, and an optional STSAFE secure element can be incorporated into the MCU to enhance the network security capabilities
- Pre-certified radio regulatory approvals for operating in the 868 and 915 MHz industrial, scientific and medical (ISM) spectrum in most geographical regions of the world
- Accommodating a wide range of temperatures, the module can operate from -40°C to +85°C
- Typical applications for this module include smart metering, wearables, tracking, M2M and internet of things (IoT) edge nodes

## Typical applications

- Smart metering
- Wearables
- Tracking
- M2M
- IoT edge nodes

