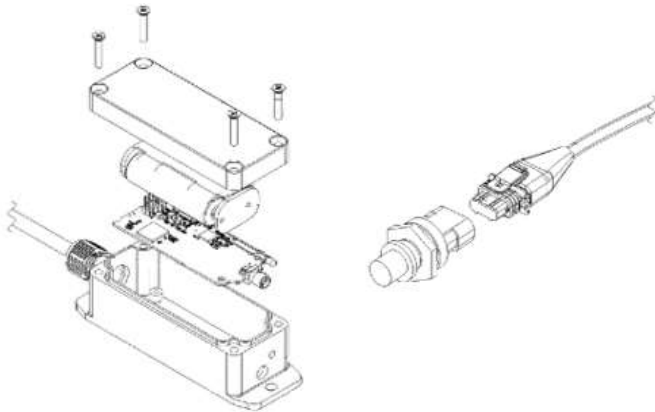




## HIGH PRESSURE GAZ AND GPS MONITORING OVER LORA



The Lora Pressure gaz reference design has been designed to provide low cost production ready product device able to monitor gaz pressure up to 280 bar and accurate tracking with GPS/GNSS Capability.

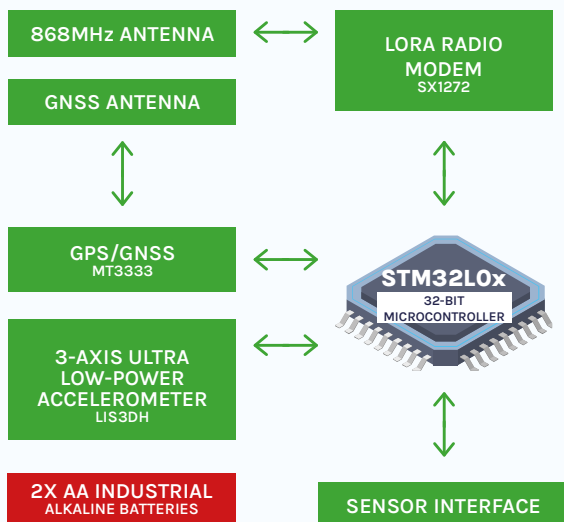
The device can run 10 years over 2 AA batteries

### FEATURES

- Connection to Bosch PR1 pressure sensor
- LoraWan Compliant
- Cayenne LPP protocol compliant
- The Thing network compliant
- Long range : > 5Km in Line of Sight
- Integrated GPS/GNSS for precise tracking and GPS coordinates
- Integrated accelerometer for movement detection and acceleration measurements

- IP65 ingress protection
- Can be used on private or Telco Lora networks
- BOM Highly Optimized
  - L Lora Chipset solution (SX1272)
  - L STM32 Memory optimizations
  - L RBOM Optimizations : Discrete RF modem, filters, decimators...
- Optimized Lora Stack
  - L Reduction of the number of bit sent
  - L Reduction of STM32 memory requirements

### BLOCK DIAGRAM



- Product Size in mm (without external antennas) : 35 x 125 x 35
- Weight : 120 g
- Operating temperature : -25 to +65 DEGC
- RF Sensitivity : -137 DBm
- RF Power : + 20 dBm
- Radio band : 868 MHz (LORA)

### OPTIONS

- Can use only internal Lora Antenna for reduced size and cost
- 4-20 Sensor interface
- External temperature probe for extended temperature measurements

### DELIVERY

- Schematics
- Layout
- eBOM
  - L Production files (PCB Structure, Component placements for SMT production machines...)
  - L Test program with test bench for manufacturing
- STM32 Firmware
- SX1272 Configuration

### ASSOCIATED SERVICES

- We can provide customization services either on the hardware or on the embedded software or on the mechanical design.
- We can manage for you the EMS in charge of the production of the device.