MOVEE®

LoRaWAN

The **MOVEE®** sensor, which integrates a motion sensor, meets the needs of geolocation, operational assistance or industrial preventive maintenance. **MOVEE®** measures and optimizes your industrial performance.

APPLICATIONS

- Geolocation via LoRaWAN® network
- Shock detection
- Activity monitoring, orientation (Tilt)
- Temperature monitoring

BENEFITS & KEY FEATURES

- LoRaWAN®, Class A
- Easy to use and deploy
- Periodic or event-driven data collection
- Measurements at regular intervals
- Up to 5 years autonomy depending on configuration
- IP68

QUALITY & RELIABILITY

- RED, RoHS

The **MOVEE®** sensor enables the logistical tracking of assets through a public LoRaWAN® network (TDoA technology with precision between 50 and 500m) or private network (geofencing).

The sensor also allows the reporting of events (shock, tilt) as part of the monitoring of assets.

Installation and commissioning are quick and easy. The sensor is equipped with:

A button for activation and deactivation,

An RGB LED to monitor configuration and pairing to the network,

The sensor can be fixed in several ways thanks to its "ears": magnets, glue, rivet, screws...

Each sensor is identified by a QR code on the label.

The sensor can also be implemented on fixed assets and provides alerts in case of shock or tilt.

The sensor will then be able to send an alert in case of a collision, for example in the context of monitoring racks in warehouses for collision detection with a forklift truck.

The status of a switch/lever is also addressable with the tilt tracking function.

Powered by a 3.6V/2000mAh battery, the autonomy of the sensor is more than 5 years with a configuration of 4 transmissions per day.

THE LARGEST IOT PRODUCTS RANGE FOR YOUR PROJECT

WATTECO is a European leader in the design and manufacture of smart IoT devices to suit all remote reading and data collection solutions.

WATTECO is a LoRa Alliance® member.

WATTECO

MOVEE®

TECHNICAL DATA

RADIOFREQUENCY	Frequency (MHz)	Transmit Power (dBm)	Receiver Sensitivity (dBm)
	EU: 863-870	+14	-140

FIRMWARE	
Protocol	LoRaWAN®, Class A
Activation method	Activation by Personalization (ABP) or Over-The-Air Activation (OTAA)
Data encryption	AES128
Measurements & Transmission cycles	Configurable from 10 minutes to 24 hours

MEASUREMENTS		Acceleration	Tilt	Temperature
	Range	-16g to +16g	0 to 360°C	-20°C to +55°C
	Accuracy	± 60mg	± 1°	± 1°C

ALARMS	
Shock	Detection of shock exceeding a predefined threshold on one of the axes (x, y, z)
Tilt	Detection of inclination exceeding a predefined threshold (pitch, roll), entry/exit of a predefined angular zone, periodic measurement
Temperature	Detection of exceedance of predefined temperature thresholds (low temperature, high temperature), periodic measurement

POWER SUPPLY	
Voltage	3.6V / 2000mAh – Replaceable lithium battery
Autonomy in a range of +10°C to +25°C	> 4 years: 4 transmissions per day

USER INTERFACES	
QRCode	Product code, serial number, batch number
Push Button	Configuration and network pairing
RGB LED	Sensor status

ENCLOSURE	Size (mm)	Fastenings	IP rating	Fire resistance
	76 x 79 x 23	2 magnets and 2 nuts (not supplied)	IP68	UL94-V0HB

ENVIRONMENT	Operating conditions	Storage conditions
	-20°C to +55°C +0%rH to +95%rH (non condensing)	+10°C to +30°C +20%rH to +60%rH

DIRECTIVES & STANDARD
Radio Equipment Directive 2014/53/EU, RoHS

CE RoHS

PRODUCT NUMBER

REFERENCE	DESCRIPTION
50-80-002	LoRaWAN® MOVEE®