

## ACS-SWITCH-RANGE®

DISTANCE MEASUREMENT







### LEVEL DETECTION

Management of containers fill level : dumpsters, bins, tanks... Notifications when the thresholds are exceeded.



### **PROCESS IMPROVEMENT**

Monitors a piece of equipment, a frame offset or a moving mechanical element. ACS-Switch-Range fits into industrial and tertiary process improvement.





### **BIKE STATIONS MONITORING**

Presence detection of bicycles at bike stations. The autonomous, wireless optical reflection sensor detects the presence of a bicycle and notifies its arrival and departure.

### **PRODUCT HIGHLIGHTS**

### PLUG & PLAY: AUTONOMOUS AND WIRELESS

Communicating through an LPWAN network, the ACS-Switch-Range is autonomous and wireless.

### **AGILE SETTINGS**

The product can be configured to adapt to its environment and provides reliable measurements. A simple initialization adapts the product to a specific environment.

**ADAPTED ALGORITHMS** for a large spectrum of use cases.

# TIME-STAMPING AND DATALOGGING of events (+3000)

### REPLACEABLE BATTERY

### **OPTIONS AVAILABLE:**

- Time-Of-Flight optical reflection sensor, Measurement from 0 to 4m.
- Ultrasonic sensor Measurement from 0 to 4m.
- Personalization on request :
  - Case color and labelling,
  - Specific features.



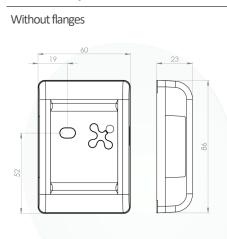
### **CLOVER-NET TECHNOLOGY**

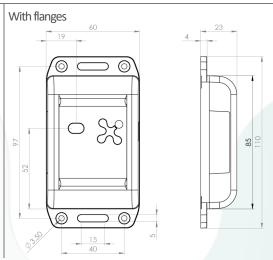
Real-time two-way communication protocol to facilitate the installation and setting of sensors, collection of time-stamped data, automatic inventories, OTA updates...



### **SPECIFICATIONS**

### **Mechanical specificities**





### Fastening system

Screw

Magnet (optional)

Glue

### Certifications

CE, EN 300-220

### **Physical characteristics**

Battery	Lithium 3.6Ah remplaceable
Material	ABS PC V0 UL94
Weight	98g
IP index	IP54 or IP66 (with seal)
IK index	IK07 or IK08 (with seal)
Operating temperature	-20°C to 70°C
Storage temperature	-40°C to 80°C
Humidity	< 95% without condensation



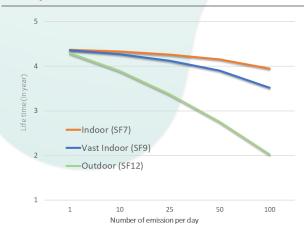
CAUTION: THIS PRODUCT USES LITHIUM BATTERY.

FOR YOUR SAFETY, PLEASE CHECK OUR WEBSITE.

### Communication

LoRaWAN	Class A
	EU868, 915US, AU915, AS923
	Private and public networks
	OTAA and ABP
	Power transmission : 14dBm (EU) to 20dBm max
	Operator compatible : Objenious, Orange
	Network core providers : Actility, Orbiwise, TTN, Loriot
SigFox (option)	RC1, RC2, RC4
CloverNet	Broadcast, multicast, point-to-point

### **Battery life**



### Use case

Optical reflective sensor

Life frame every 24 hours

Measure every 15s

Alarm emission on exceeding threshold

### **Data transmitted**

Distance

Alarm in case of change of status or if it exceeds the threshold

Threshold crossing counter

History of time stamps

Activity data (battery, ...)

Temperature level

Settings configuration by downlink

### **INEO-SENSE**

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