

# Product Catalog





# TRACE

Identify, locate

# SECURE

Protect, control





# COLLECT

Enhance, supervise

# INFORM

Report, alert



# Bespoke solutions





# Identify, locate

Real-time indoor—outdoor geolocation

•TRK-Tracer®

•TRK-Tracer-GPS®

•TRK-Tracer-NOTE®

•TRK-Zon®





# **TRK-Tracer**®

Locate, identify and inventory your equipment

**USE CASES** 





Production flow tracking Analysis

Stock management

# 

109 mm

59 mm

Clover-Net



Tracks the progress of production steps in real time. Identifies priorities. Finds the boxes out of process.

## ANALYSIS OF THE USE RATE

Inventories and locates major tools or construction equipment. Detects exits from the operating area. Ensures that construction equipment is properly loaded. Reduces theft.

# STOCK MANAGEMENT

Analyses transport times and use rates. Inventories packaging on each site for better operation.

# AVAILABLE OPTIONS

- Buzzer-type audible alarm,
- Customisation on request:
  - Specific business functions
  - Case colour and labelling









.09 mn

59 mm

Clover-Net

# **TRK-Tracer-GPS®**

# Autonomous location and GPS (GNSS)

**USE CASES** 





Managing, locating and securing your equipment fleets

Tracking of assets, containers and sensitive parcels

# MANAGING, LOCATING AND SECURING YOUR EQUIPMENT FLEETS

TRK-Tracer-GPS allows you, in real time, to know the location of all your equipment (work engine, welding station, dumpster, compressor, etc); in addition, its motion sensor will allow you to know its run time.

Thanks to this remote management, you are able to make resource allocation in line with your needs, apply a billing to use and optimise your maintenance rounds for the dispatching of your equipment.

#### TRACKING OF ASSETS, CONTAINERS AND SENSITIVE PARCELS

Geolocates of your assets and controls storage temperature with an integrated temperature sensor. Records all events during the journey. Reduces risk of theft.



**TRK-Tracer-NOTE**®

Digitalisation of visual management & dynamic production

## **USE CASES**



Production flow

monitoring



sheet

Dynamic tracking

Inventory management

#### PRODUCTION FLOW MONITORING

The TRK-Tracer-NOTE allows you to follow the progress of production steps in real time, identify priorities, find out which box are out of process, etc.

#### DYNAMIC TRACKING SHEET

The ePaper display can replace the routing sheets dynamically to inform about priorities and urgencies but also to indicate additional information related to a production batch.

#### STOCK MANAGEMENT

The TRK-Tracer-NOTE allows you to monitor production line progress in real time. It also allows you to keep track of items at different locations and optimise production.

Option available : Call button / With or without flange





LoRa

RK-Zon

DevEUI : 70B3D56371D4B40F

RK-ZON-MAIR-X89-640

161 mm

# USE CASES







Inventory and stock management

## INVENTORY AND STOCK MANAGEMENT

Keeps track your equipment by simply installing a zone beacon in storage locations. Ineo-Sense TRK-Tracer tags identify the beacon and trace the information back to the network.

# CHECK IN / CHECK OUT

Identifies inbound and outbound assets at your guard posts, on the fly and in real time, without having to open your vehicles.

#### TRACKING PRODUCTION FLOWS

Tracks the progress of production steps in real time by judiciously positioning the zone beacon at each stage.



91 mm



# SECURE

Alert, Control

Give your security staff the real-time data they need

•ACS-Switch<sup>®</sup>

- •ACS-Switch-PIR<sup>®</sup>
- •ACS-Switch-TOF<sup>®</sup>
- •ACS-Switch-HYGRO®
- •ACS-Switch-BUZZ<sup>®</sup>
- •ACS-Switch-BP<sup>®</sup>
- •ACS-Switch-REED<sup>®</sup>
- •ACS-Padlock-II®





Detection of openings and positions

USE CASES

Access control



59 mm





0

Fire safety



Cold room





Infrastructure management

# ACCESS CONTROL

Detects openings and closings of doors, gates and roof windows, etc. Allows you to detect intrusions and count passages.

#### FIRE SAFETY

Monitors hatches, fire safety domes or fire doors thanks to tilt measurement.

## COLD ROOM

Detection of openings of transport vehicle doors along with the temperature monitoring. Alarm sent in the event of a break in the cold chain.

# MANAGEMENT OF INFRASTRUCTURE AND ENGINEERING STRUSTURES

Securing loading docks and trailers. Monitoring of shuttle boxes and containers of all types by detecting shocks, vibrations and temperature measurement.



**ACS-Switch-PIR®** 

Infra-Red presence detection (PIR)

USE CASES





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Intrusion detection Facilities management

# Counting

# INTRUSION DETECTION

Monitors accesses on premises by infrared detection (PIR). Optimises on-call duties and security checks.

# FACILITY MANAGEMENT

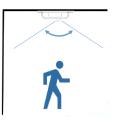
Occupation rate of meeting rooms and areas open to the public for a better organization and optimization of maintenance checks.

# COUNTING (ACS-Count-IR)

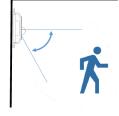
Monitor access and count people, bikes or cars: public restrooms, bike stations, car parks, etc.

# AVAILABLE OPTIONS:

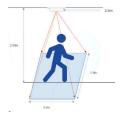




PIR 5m: Ceiling position



PIR 12m: Wall position



PIR 5m: barrier



85 mm

n

59 mm



# ACS-Switch-TOF®

# **Distance measurement**

109 mm



N

59 mm

## USE CASES



Level detection

Process improvement

Bicycle rack management

#### LEVEL DETECTION

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

#### PROCESS IMPROVEMENT

Monitors a piece of equipment, a frame offset or a moving mechanical element. ACS-Switch-TOF 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.





ACS-Switch-HYGRO®

## **USE CASES**







Storage area

Industrial process

Off-line cold chain

#### STORAGE AREA

The ACS-Switch-HYGRO is a self-contained, easy-to-use instrument to measure the temperature and humidity of storage areas in order to comply with storage standards.

#### **INDUSTRIAL PROCESS**

Control of heating processes and communication of essential information. In case of anomaly, refer to the ACS-Switch records.

#### OFF-LINE COLD CHAIN

Monitor your cold chain without special connectivity. Consult the ACS-Switch's history directly to check that cold chain has not been compromised.



85 mm

0

Kiges ★ ESG-Logger-HYGRO SN: 0104840F 70830563710840F SN: 0104840F SN: 0104850F 

59 mm

Clover-Net

# **ACS-Switch-BUZZ®**

# Autonomous alarm

# **USE CASES**







# SAFETY ALERT

Equipped with a buzzer and an intelligent sensor (tilt, movement, magnetic environment, etc.), you will be warned of an abnormal position (opening or closing) of accesses such as fire doors, hatches, fire domes, etc.

#### **REMOTE ALARM**

Combined with other types of sensors, ACS-Switch-BUZZ will warn you if a process is not respected or if a fixed value (temperature, humidity, tilt) is exceeded.

#### PROCESS ALARM

Alarm is triggered if an abnormal position is detected along with a timer (fridge door to make sure the cold chain is respected, industrial oven, boiler, etc).





59 mm

**ACS-Switch-BP**<sup>®</sup>

# Connected button

USE CASES



Supply

management



Alert

Process improvement



118 mm

0

68 mm

#### SUPPLY MANAGEMENT

Initiate a supply request through a simple connected button. The request is immediately transmitted and can be validated through the product LED.

#### ALERT

Transmit an alert message when reporting an equipment failure.

## PROCESS IMPROVEMENT

Signal a start or an end of an operation, report a delay, defer a machine order or launch a flow.

## AVAILABLE OPTIONS:

2 or 3 buttons models (colour to choose from: blue, red, green, yellow, black or white),









# **ACS-Switch-REED**<sup>®</sup>

Opening detection internal/external REED, dry contact

**USE CASES** 





Access control

Fire safety

# ACCESS CONTROL

Detection of openings and closings of doors, gates, roof windows, etc. Allows you to detect intrusions and count passages.

# FIRE SAFETY

Monitoring of hatches, fire safety domes or fire doors.

# AUTONOMOUS AND MAGNET-FREE DETECTION

The ACS-Switch detects the opening and closing of sashes either by internal or external REED or external dry contact.

# **AVAILABLE OPTIONS:**

Specific sensor on request







CS-Switch NI: 01D3CEA

68 mm





118 mm

15

# ACS-Padlock-II®

# Reusable connected seal

USE CASES









Transportation Road

Electrical Consignment

Access Managment

Logistics



Clover-Net

97 mm

ROAD TRANSPORT Monitors your cargoes for

Monitors your cargoes for the duration of the transport. Lock and unlock notification. Fraud alert.

# ELECTRICAL CONSIGNMENT

Manages the consignments of electrical cabinets and their various protection devices and controls.

# LOGISTICS

Control of connected padlocks to secure loading docks. Remote control of the padlocks.

# ACCESS MANAGEMENT

Secures access. User management with rights allocation. Fraud alert and notification of locking/unlocking with user identification.





# COLLECT

# Enhance, Supervise

Monitor your equipment and prevent issues efficiently

- •ESG-Logger<sup>®</sup>
- •ESG-Logger-NRJ<sup>®</sup>
- •ESG-Logger-PULSE®
- •ESG-Logger-TEMP<sup>®</sup> external probe
- •ESG-Logger-LC®





# ESG-Logger®

# Recorder for analog probes

**USE CASES** 







Level measurement

Pressure control

Battery supervision

# LEVEL MEASUREMENT

Using the ESG-Logger with a potentiometric level probe allows monitoring of the level of a tank or container. It thus makes it possible to optimize filling management and better manage stock shortages.

# PRESSURE CONTROL

With a pressure probe, ESG-Logger detects pressure changes and levels and alerts on thresholds. Your supervision becomes more efficient, more accurate and your maintenance operations are optimized.

# **BATTERY SUPERVISION**

The analog interface allows the measurement of a DC voltage of 5V, 12V or 24V. The supervision of different types of batteries is made possible by the ESG-Logger.





**ESG-Logger-NRJ2<sup>®</sup>** 

# Electricity consumption tracking

**USE CASES** 

Consumption distribution

123

Metering

Preventive maintenance

# CONSUMPTION DISTRIBUTION

The ESG-Logger-NRJ allows you to measure the consumption of different energy items in your industrial facilities in order to identify the major consumption items.

# **METERING**

Plug and Play solution: simple consumption monitoring without wiring allowing its use in various locations.

# PREVENTIVE MAINTENANCE

Monitoring of electrical installations to identify consumption patterns, forecast overconsumption and breakdowns.



# ESG-Logger-PULSE®

Monitoring of consumption by pulse counting



# **USE CASES**



Consumption reporting

Leak detection

Usage period

## CONSUMPTION REPORTING

Consumption reading from pulse meters. Easy to install and to connect.

## LEAK DETECTION

Detection of anomalies thanks to its calendar operation and the on-board processing of the pulse meter.

## **USAGE PERIOD**

Behavioral monitoring to determine an operating profile.









# **ESG-Logger-TEMP<sup>®</sup>** External probe

# Surface temperature control

109 mm

59 mm

# **USE CASES**







Industrial process

Monitoring of heating plant

Off-line cold chain

#### **INDUSTRIAL PROCESS**

Monitor your paint booths, your ovens, your heating processes and report only the essential. In case of anomaly, refer to the records of our ESG-Logger.

## MONITORING OF HEATING PLANT

Measure the inlet and outlet temperature of your plants by adding a sensor and simply contacting the probes at the connections.

#### **OFF-LINE COLD CHAIN**

Monitor your cold chain without any particular connectivity. Once arrived at your destination, consult the ESG-Logger's history directly to check that cold chain has not been compromised.



# **ESG-Logger-LC**®

# Connected weighing plate

**USE CASES** 







Stock control

Kitting management

Identification of stock movements

# STOCK CONTROL

Lack of stock of an item in a production or maintenance organization can lead to production stoppages or material downtime. Real-time monitoring of your stock level solves this risk and enables better planning. Critical stock level information allows to generate automatic restocking calls.

## **KITTING MANAGEMENT**

When preparing a kit of materials or accessories, handling errors are common. Weight control can come in addition to validate each item and the global weight of the preparation. These automated controls bring a complementary validation.

# IDENTIFICATION OF STOCK MOVEMENTS

Our ESG-Logger-LC integrates an alert on weight deviation measurement allowing to inform in real time of any stock movement. This real-time measurement can be coupled with the (optional) Pick-to-light function, available in order, to guide the logistics operators in their order picking mission.





# INFORM

Report information and data in real time

•REP-Report-NOTE®

•REP-Report-LED®

•REP-Report-IO



# **REP-Report-NOTE**<sup>®</sup>

Connected display & event activator

## **USE CASES**





Logistics & transportation

60 mm

Facility management

# **TRANSPORT & LOGISTICS**

Simple and efficient visual identifier to inform drivers, operators or production staff of the content, quantity, availability and/or destination of the goods.

## **INDUSTRIAL PROCESSES**

View and update production and flow information in real time. Manage tasks by priority or status and present this information to operators.

# ACCESS MANAGEMENT

Update the information displayed remotely according to the status of the action. Automatic update or force update with the "Tap" function.

# **AVAILABLE OPTIONS :**

- 3 color displays (white, black and red)
- Call button on the front
- Pick-to-light function with LED
- PIR detector on the front
- Indoor LoRa geolocation
- Embedded business process







109 mm

# **REP-Report-LED**<sup>®</sup>

# Autonomous light indicator



#### **USE CASES**







Logistics and Transport

# Security alert

Industrial processes

# LOGISTICS AND TRANSPORTATION

Simple and effective visual signal to inform drivers or operators where to go or deliver a package in a warehouse.

#### **SECURITY ALERTS**

Column type or flashing light signal to indicate different security status. You can add the ACS-Switch-BUZZ to have a sound alert.

## **INDUSTRIAL PROCESS**

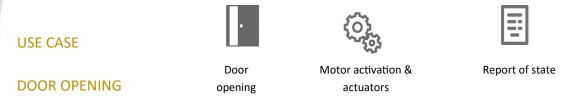
Monitors the health condition of a machine. Manages tasks by priority or by status with different LED colours.





# **REP-Report-IO**<sup>®</sup>

# Actuator / Opening sensor



Thanks to its real-time bidirectional communication mediums, the REP-Report-IO allows the supervision and activation of electric latches as far as 500m away, without any cable. Typically used for access doors or storage containers.

## MOTOR ACTIVATION AND ACTUATORS

This sensor integrate 2 independent power relays (230Vac / 5A) that enables, for example, the control/command of motors or actuators. The all-or-nothing inputs (dry contact) will detect the return of a position switch indicating the correct activation of the device, or other useful information. In addition, and the weekly calendar allows routine operations to be set up in advance.

## **REPORT OS STATE**

It can be used for mutual status. In this case, 2 REP-Report-IOs are paired by configuration, the change of state in the input of one can activate the output relay of the other, thus allowing immediate remote status transfer and overriding wiring between an activation contact and the motor or actuator.









# **Bespocke solutions**



The heart of our devices is the Clover-Core<sup>®</sup>, our proprietary technological platform. Its versatility allows Ineo-Sense to design custom sensors to match your exact need. We fully control both the hardware and firmware, and our products are designed in France and made in the EU.

Our expertise in different communication networks (LoRa, Sigfox, BLE, LTE-M and NB-IoT) means we can offer you the most suitable solution depending on your specific IoT use case.





Stay connected and more and more especially with the upcoming arrival of new cellular technology such as **LTE-M** and **NB-IoT** which will soon be integrated into our products...



Contact us for more information.





# BRINGING SENSE TO WIRELESS

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