



## **SUMMARY**

- About inVirtus
- An end-to-end solution : Hardware, Software & Connectivity
- Construction use case; Indoor geolocation: Anchors & Beacons
- Construction use case; Outdoor geolocation: Trackers
- inVirtus Cloud
- inVirtus App
- Benefits
- What's next



## Who we are

Developper and integrator of IoT solutions dedicated to indoor & outdoor Asset Tracking.

### **End-to-end turnkey solution**

- 1- Tracking device
- 2- open and scalable supervision software suite.

#### **Sectors:**









#### They trust us:











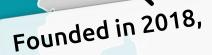












20p, Nantes

Expert of indoor & outdoor

All in 1 partner: Hw & Sw

+25.000 connected objects

Made in France















## Issues addressed:



The needs in traceability are increasing everyday, whether to optimize your production flow or to monitor your asset movements on different plants. These kind of pains can easily be resolved with IoT solutions.

#### Lost or stolen Assets

- Waste of time searching
- Unnecessary investments



Low visibility of Assets' movements

- Poor optimization of asset uptime
- Double investment in containers

# inVirtus: an end-to-end solution



inVirtus is one of the few market players offering a complete solution: hardware, software, connectivity, and integration to customers' systems



# Indoor geolocation



**Objective:** Traceability of small equipment, toolbox, screwdriver, drill, ...

## ivBeacon Lite

Fixed on each case.

Follow in real time your asset at home and on your work site.

#### ivScan Chronos

Generate zones allowing you to set up your equipment and transmit information in real time.

#### **Issues:**

- Administrative burden to validate delivery to the job site.
- Loss of time in the inventory.
- Poor visibility on the quantities in stock in your warehouses.



## Indoor Geolocation: Create zones up to 50m with inVirtus Anchors

Weight: 288q

Battery life: 10 years

**Communication protocole**: MQQTs

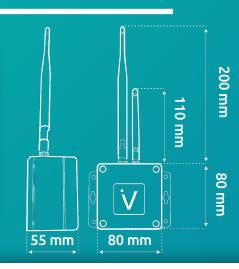
LORAWAN class A: 868 Mhz

BLE / LoRa antenna: Omnidirectionnal

Advantages:

**IP67** 

Temperature: -40°C / +85°C





Up to 10 years autonomy



Scanning: 1 200 beacons

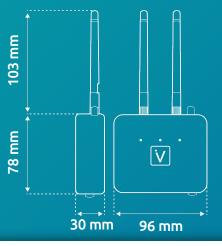


No wire required



Scope range Up to 100 m

ivScan Athena



Weight: 122q **Set-up**: Automatic

Power Supply: DC 5V, Micro-USB, PoE **Communication protocole**: MQTTs LORAWAN Class A: Omnidirectionnal

Advantages:

Ethernet / Wifi connexion

Temperature: -30°C/+70°C



Scanning: 10 000 tags per scan



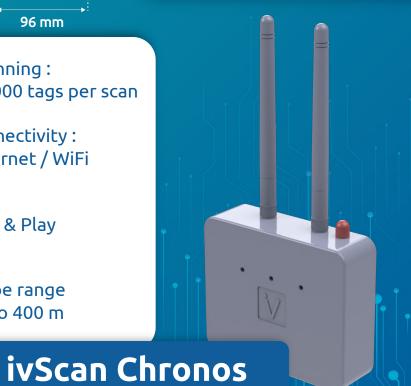
Connectivity: Ethernet / WiFi



Plug & Play



Scope range Up to 400 m

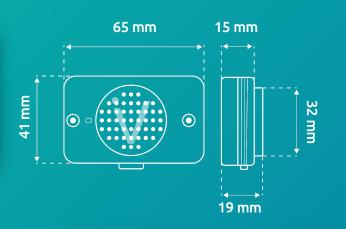


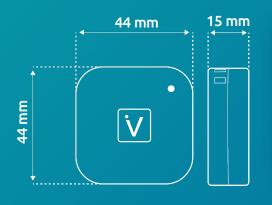
## Indoor Geolocation: Track your assets with inVirtus beacons

**Bluetooth**: BLE 5.3 **Casing**: Polycarbonate

Weight: 18g

Button / LED : On / Off Scope : Up to 120m Battery : LiMnO2





**Bluetooth**: BLE 5.3 **Casing**: Polycarbonate

Weight: 13g

Configurable LED: On / Off,

Alarm...

Scope: Up to 120m

**Battery**: CR2477, 1000 mAh, 3V





Battery Life Up to 6 years



BLE
Bluetooth Low Energy



Buzzer 100 dB



Temperature -40°C/+60°C

ivBeacon Sonos



Battery Life: Up to 10 years



BLE Bluetooth Low Energy



IP67 Waterproof



Temperature -40°C / +85°C



ivBeacon Lite

## Outdoor geolocation

**Objective:** Follow-up of your small and large asset on your work sites.



The InVirtus Tracker locates your assets. It scans your devices contained on your site, avoiding forgetfulness and alerting of thefts. A signal is sent to the platform to alert you...



ivBeacon Lite

BLE tag installed on each tool. It allows to be scanned by the Tracker when entering/leaving your site.



#### inVirtus App

Scanning of incoming/outgoing products

#### Benefits:

- Real-time proof of delivery to the job site
- Instant inventory on site and at the customer's location
- Reduce the amount of asset to be repurchased
- Optimization of your asset maintenance
- Statistics on rotation/utilization rates



## Outdoor (+Indoor) Geolocation: Track your assets with GPS(+BLE) ivTrack Evo

#### ivTrack Evo



Up to 10 years



Functionning Temperature:

-40°C / +85°C



Shock-resistant

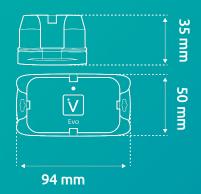
**IK09** 



**IP68** 



Anti-Vandalism



Install Plug & Play and World Wide

Hybrid technologies

Smart GSM (2G, LTE-M, NB IoT)

Omni-directional GNSS

Accuracy < 5 m\*

Multi-GNSS fix mod

Normal, Dynamic, S&S

**BLE Bi directional** 

Data recovery

#### Configurable indicator

- 3D accelerometer
- Buzzer
- Temperature sensor
- Remotely configurable
- Color panel

## Outdoor (+Indoor) Geolocation: Suitable for installation in constrained environments

#### ivTrack Nano



Battery life:

5 years with 2 localization / day



Functionning Temperature:

-40°C/+85°C



Shock-resistant

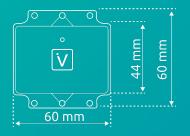
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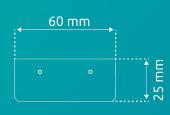


Waterproof **IP66** 



Anti-Vandalism





Install

Plug & Play and World Wide

Multi-GNSS fix mod

GPS, GLONASS, Galileo & QZSS

**BLE Bi directional** 

**BLE Transmitter & Receiver** 

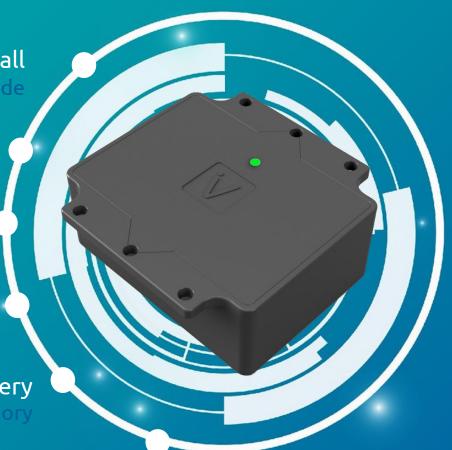
Hybrid technologies

Smart GSM (2G, LTE-M, NB IoT)

Data recovery

#### Configurable indicator

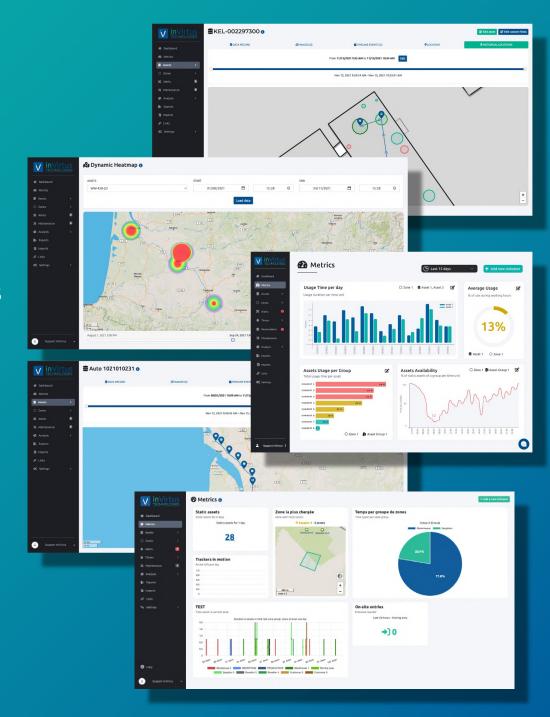
- 3D accelerometer
- Buzzer
- Temperature sensor
- Remotely configurable
- Color panel



# inVirtus cloud plateform 🔽 🚎



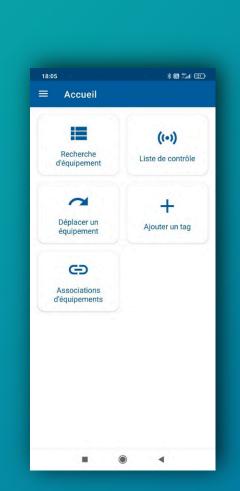
- Locate immediately what you look for
- Achieve frequent, precise multi-zone inventories
- Create geofencing zones
- Set up alerts and be informed in case of unexpected events
- Retrace movements history
- Compare theoretic / real tack times
- Analyse rotations and identify bottlenecks
- Improve production flows, equipment allocation
- Optimize tool maintenance
- Choose your own indicator dashboard
- Push geolocation data to your own system (ERP, WMS...)

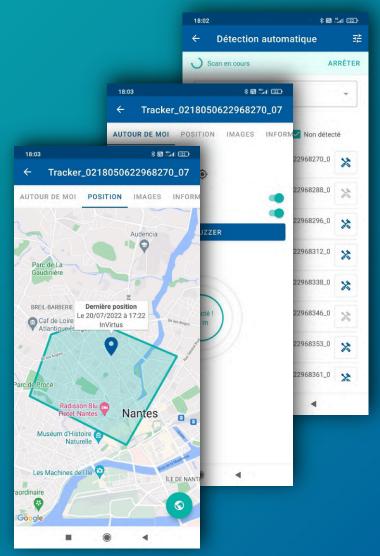


# inVirtus Android App

- Pair / unpair asset to a beacon
- Locate immediately your asset
- Know your distance with the asset
- Activate the beacon LED / buzzer
- Edit the asset informations







## inVirtus Solution : Benefits

Seamless Indoor & Outdoor geolocation

Easy integration with ERP and other 3rd-party systems

Easy plug & play installation : costly infrastructure required



On-premise installation for highest data protection

1 single partner for a complete, simple and reliable solution

Expertise in Asset and Production Order Tracking, with process optimization features

Evolutive and innovative solution (Tag buzzer, solar panel, software monthly releases, ...)

## What's next?



MEETING / VISIO / DEMO

**STARTER KIT** 

PoC

GO

**MAINTENANCE** 

Let's meet for more information



inVirtus offers 2
starter kits
(indoor /
outdoor) for test
purposes



A premium « starter kit » tailored to your needs, and the support of a project manager for set-up and training



Full deployment





inVirtus offers

Long term
support for
mainteant, data
analyses and
process
optimization







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# THANKS FOR YOUR ATTENTION



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