SMART
LIFTS SMART LIFES

One SIM,
the whole elevator
connected

1. An ambitious project

GSR stems from the need to satisfy a certain requirements with a set of features previously unknown

Until today, **Advertisim** device installation required an availabe **wifi network** on site or to choose a **3G connectivity** from a **SIM card** embedded in the device.

The development of powerful analytical tools and the need to send high volumes of data, clearly showed a new important requirement of having **3G/4G devices**.

In view of this needs, the Nayar Systems R&D team raised to develop its own device in order to offer a solution to the market requirements and in addition incorporate another main feature as it is to be able to execute third party software.
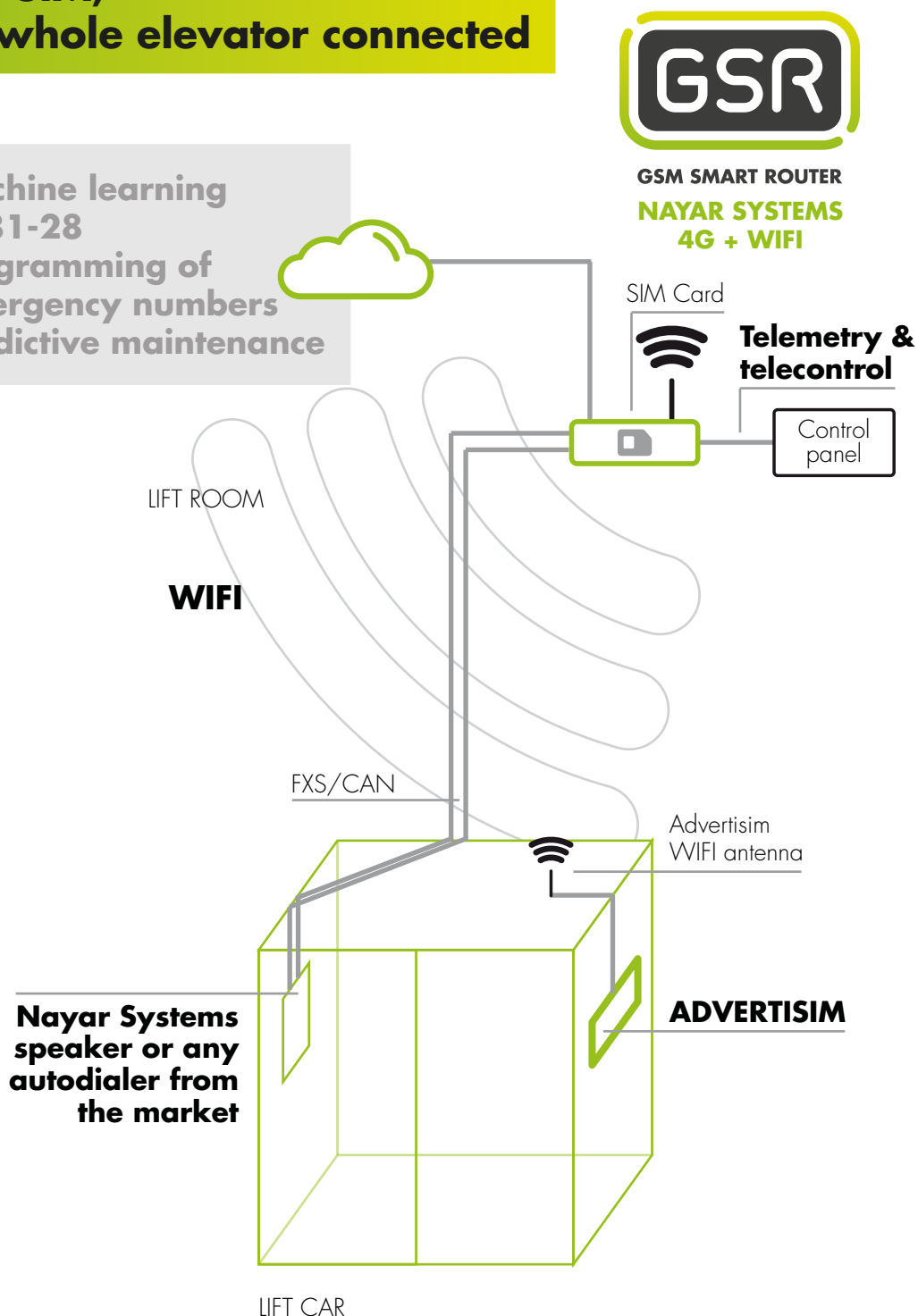
With this prerequisites; **wifi**, **3G/4G** and **upgradeable by software**, the new Nayar Systems's device is born: **GSR · GSM Smart Router**

2. How does this project fit with the ecosystem of Nayar Systems products and services?
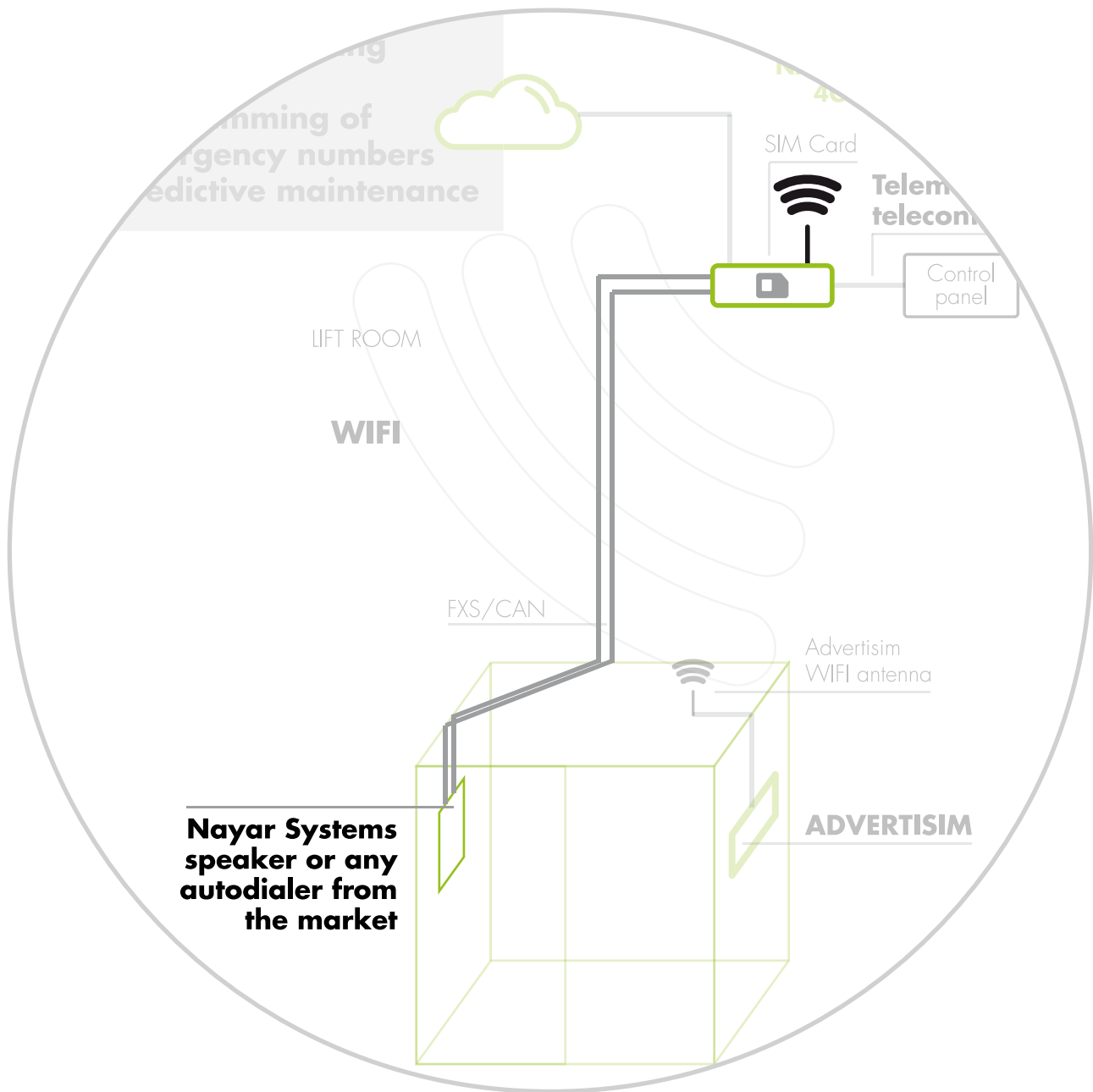
One SIM, the whole elevator connected

- Machine learning
- EN81-28
- Programming of emergency numbers
- Predictive maintenance

GSR

GSM SMART ROUTER
NAYAR SYSTEMS
4G + WIFI

SIM Card

Telemetry & telecontrol

Control panel

LIFT ROOM

WIFI

FXS/CAN

Advertisim WIFI antenna

ADVERTISIM

Nayar Systems speaker or any autodialer from the market

LIFT CAR

1 SIM = GSR **+** ∧DVERTISIM **+** 72 horas

GSM SMART ROUTER

Welcome to the connectivity

M2M TECHNOLOGIES

EN81-28
Telemetry & telecontrol
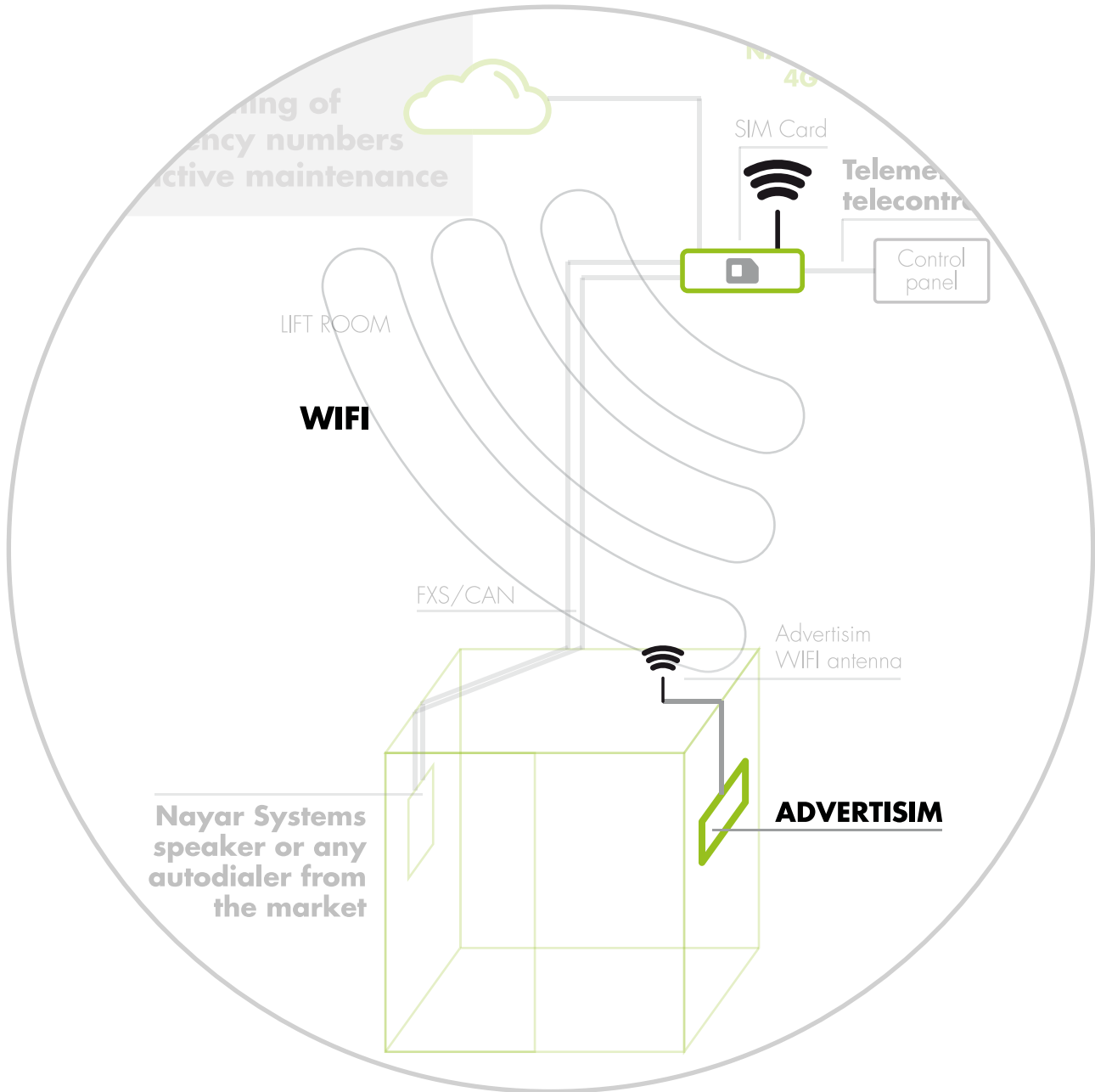
2.1. GSR as 3G/4G device

GSR can behave like a **3G or 4G GSM device** connected to **any autodialer on the market** through the existing **FXS connection** in an installation.

In addition to complementing GSR, we launched a **cabin car installable module that complies with EN81-28 / EN81-70 standards** including **microphone**, **speaker**, **pictograms** and **Bluetooth**.

This new module communicates with GSR through a **CAN protocol**, so that it is also **compatible with multi cabin car installations**.

> ### 72horas services . Autodialer programming
> ### ECHOTEST . Battery alerts
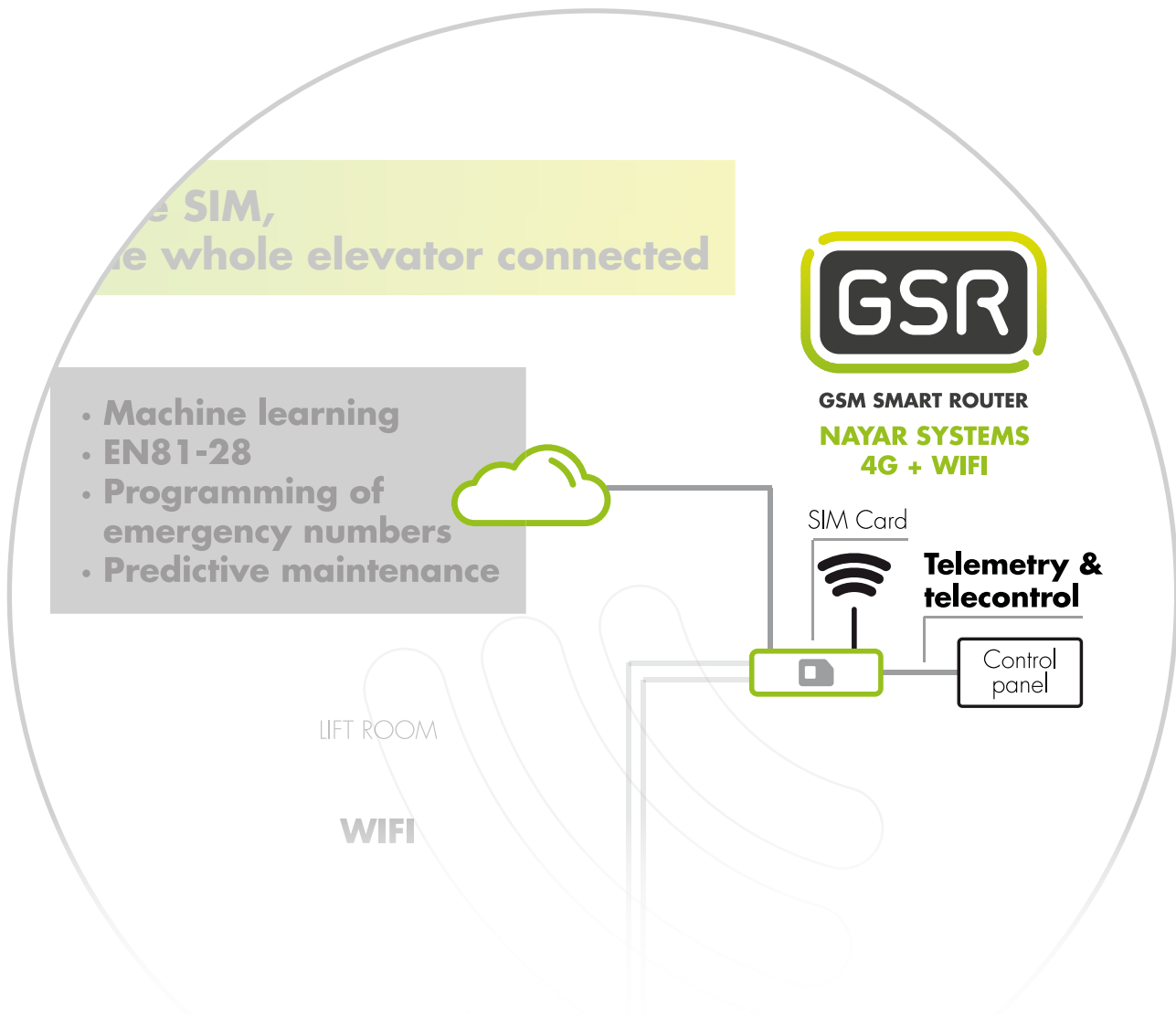
2.2. GSR as wifi hotspot for Advertisim

The ability to **broadcast a Wi-Fi network** in the elevator shaft makes GSR the perfect complement to an Advertisim installation. In this way, **it is no longer necessary to have a SIM card** on the screen itself or to rely on the WIFI network of the installation, which in most cases is not properly adapted.

With GSR, a directional **Wi-Fi antenna** is included to provide connectivity throughout the elevator shaft for Advertisim to have secured **cloud connectivity**.

**Single SIM card · Easy Advertisim installation
Connectivity assured by GSR · 360º solutions
Independent from client wifi network**

2.3. GSR as data and communications center for telemetry and Machine Learning

GSR

GSM SMART ROUTER

NAYAR SYSTEMS
4G + WIFI

e SIM,
e whole elevator connected

- **Machine learning**
- **EN81-28**
- **Programming of emergency numbers**
- **Predictive maintenance**

SIM Card

Telemetry & telecontrol

Control panel

LIFT ROOM

WIFI

The GSR device is connected to the controller via a **CAN port** or a **USB expansion module** in case of other industrial interfaces. All data emitted by the controller (or other devices such as inverters,autodialers or energy recovery systems) are collected, analyzed and transmitted through GSR and its 3G / 4G connection to the cloud.

The **ability to analyze** these data has enabled us to launch the **telemetry and telecontrol** service for our customers. Thanks to this innovative project the customer has **real-time data** processed in a visually appealing way.

This new tool puts in the hands or the customer the possibility of **analyze the performance** and **functionality of any installation**, drawing patterns that relate certain indicators with breakdowns or with the performance of certain spare parts. As a result of this process, it is possible to **anticipate future failures** to perform a **predictive maintenance** of the installation.

This ability to learn from the past is precisely what **Machine Learning** is about, a new project that Nayar Systems will soon incorporate along with other cloud services that are already available.

Telemetry · Telecontrol · Predictive maintenance
Machine learning · Big Data · Industrial IoT

3. Datasheet

PRODUCT FEATURES

Regulation
- EN81-28 compliant

GSM gateway
- Compatible with all type of autodialers available on market
- DTMF regeneration algorithm

Autodialer
- Autodialer function compatible with audio modules available on market
- Future release of a new audio module developed by Nayar Systems

Development platform
- System based on Linux
- Code 100% designed specifically for lift industry
- Allows to add and run custom scripts
- Communication with controller, multi-brand compatibility
- Safe connections secured by VPN
- Integration with 72h platform
- Plug'n'Play installation
- Machine Learning and Big Data management

New functions
- Telemetry
- Telecontrol

TECHNICAL SPECIFICATIONS

Processor
- MIPS CPU architecture

Memory
- 64 Mb RAM
- 16 Mb Flash

Connectivity
- WiFi 150M 2.4Ghz WiFi, 802.11 b/g/n
- 3G/4G mini PCI-E modem
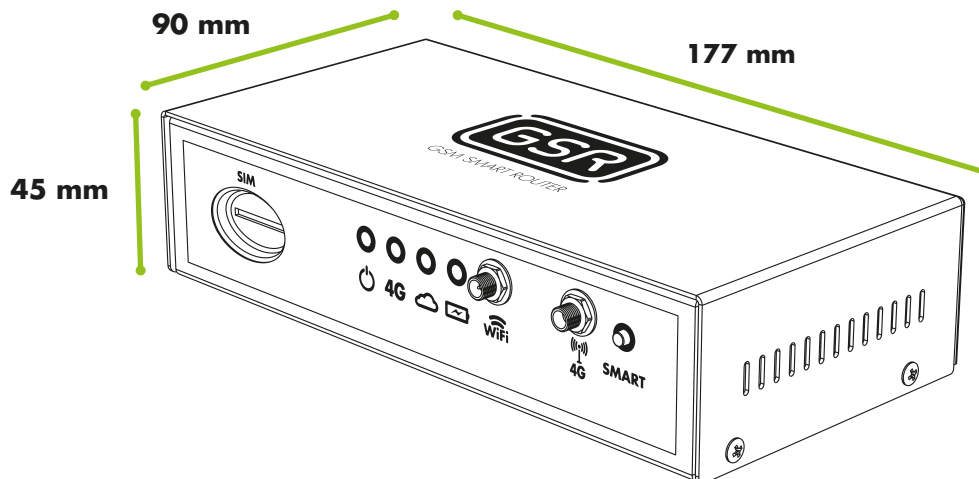
Connection ports
- Standard size SIM
- Telephone SLIC
- RJ45 x2
- USB Host x1
- RS 232 x1
- CAN x1
- 12V output x1
- SMA F connector for 3G/4G antenna
- RP-SMA F connector for WiFi antenna

Battery
- Lithium technology

The product includes
- WiFi antenna
- 3G/4G antenna
- Power supply

90 mm

177 mm

45 mm

MAKE THE ORDINARY
EXTRAORDINARY

GSR
GSM SMART ROUTER

NAYARSYSTEMS

72 horas
M2M TECHNOLOGIES

ADVERTISIM

net4machines

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