



## **Internet of things**



Wireless Sensors Network



































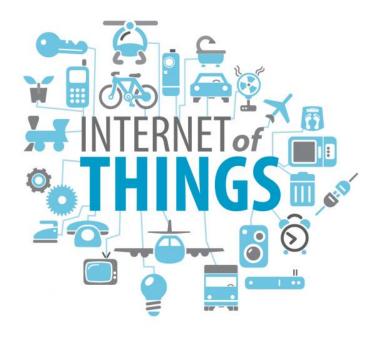


Cuby collects data from multi-technology Sensors and manages them individually. It is a scalable solution. It can be powered by a solar panel, both by a battery or directly connected to the power line.



#### WEB SERVER INTERFACE

You can manage the sensors of your wireless sensors network from any devices commonly used such as smartphone or tablet.





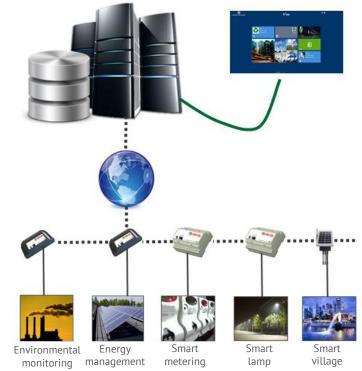
# **Energy Management**

**Sp.Net Cloud** 

Sp.Net Cloud Management is an operative centre developed by Ste to allow the control and management of several remote device deployed all over the world.

- > High performance level
- > Easy to use
- > NON-homogeneous data integration
- > Statistical and previsional data analisys







### **High efficiency Solar Panel**

- Innovative high efficiency Solar Panel
- Integrated ( at PV panel ) Storage ( Supercap + Battery )
- Integrated power electronic and communication
- Distributed sensors to control the whole system

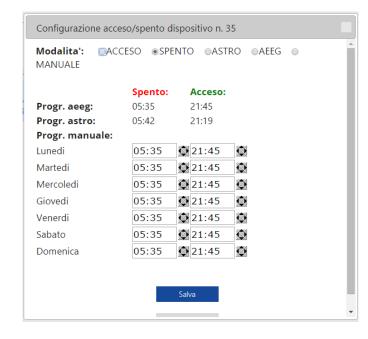
The 70,000 seat stadium is infused throughout with green technology including photovoltaic cells as well as kinetic energy panels, as marketed by Pavegen Systems





# **Energy Management Sp.Net Cloud**





# Smart Lighting Management













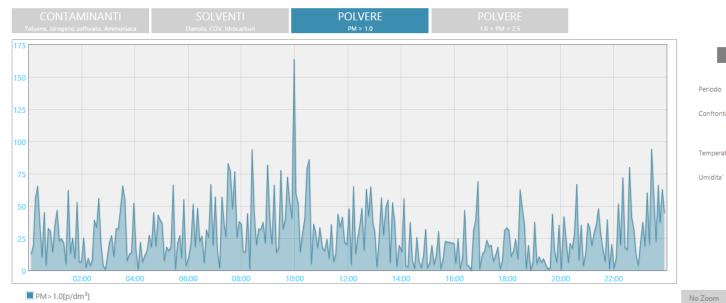
### **Smart City Control Panel**

- 1. Parking
- 2. Lighting Management
- 3. Pollution Management
- 1. Efficiency
- 5. Environmental Sensors
  Temperature, Pressure, Lighting, Inclinometer,
  Water Meter, TPMS, Humidity, Traffic
  Management, Level Measurement.





# **Energy Management Sp.Net Cloud**





# Statistics Data Export







### Wireless Sensors



Spagnolo srl	v
■ Parcheggio Esterno	
SP (N. 10003701)	<u>.1.1</u>
SP (N. 10003702)	<u>.hl.</u>
SP (N. 10003703)	<u>.al</u>
SP (N. 10003704)	<u>la.</u>



**GATEWAY INTEGRATION** 

#### **Smart-Lamp 169MHz Gateway**

With Cuby is possible to manage different sensors at the same time. Cuby has on-board all technologies needed for the accomplishment of typical wireless infrastructure focused on a wireless sensors network.

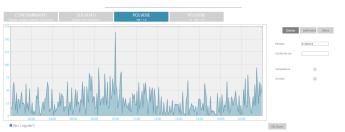
The system is able to simultaneously handle all on-board peripherals thanks to an extremely performant firmware.

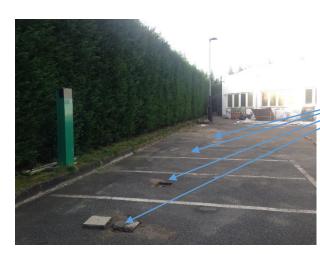
In this regard, either managing monodirectional low-consumption sensors or controlling data collecting hubs within an urban environment it becomes simply possible and real.

User friendliness and the expansion capability turn the CUBY into an essential choice should you wish to realise an highly professional product.

### Smart-Lamp 169MHz Gateway

- Smart Lighting
- Power Meter
- Smart Parking
- Pollution Management
- Complete Wireless Infrastructure







#### **Parking Sensor**

- Wireless
- Magnetometer
- Up to 200mt communication
- 10 Years battery life



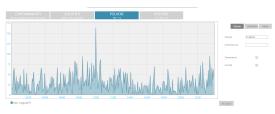
# The Sp.Net Wireless Sensors

WIRELESS SENSORS INFRASTRUCTURE



Pollution PM10 - Contaminanti, Polveri.





Water and Gas Meter 169MHz





**Smart Lamp 169MHz** 

- > Current
- > Energy Consumption
- > Video
- > Parking receiver
- > Wi-fi
- > Efficiency

### Parking sensor





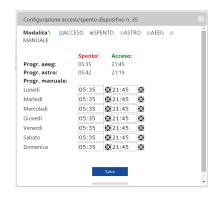
#### Micro.Sp Sensors

- > Temperature
- > Vibration
- > Luminosity
- > Inclinometer
- > Humidity
- > Pressure









**TPMS** 



















































