

# Winner of Smart City 2018

## **INSTAR H-SMART, Solution for Smart Cities**

The **H-SMART** platform has won Czech national prize in the category: **SMART CITY with a population up to 10,000 inhabitants!** The awards ceremony of the second year of Smart cities for the future 2018 organised by the SCII – **Smart City Innovations Institute** – took place during the German-Czech cooperative forum, “Smart City technologies”.



### **H-SMART - The future is Now!**

# INSTAR H-SMART, Solution for Smart Cities



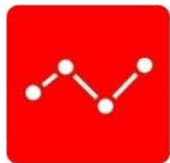
**H-SMART** - an open integrated hardware and software platform using the **Internet of Things (IoT)** to implement SmartCity and SmartGRID systems with a flexible customer scalable environment for both small towns and big cities.

# INSTAR H-SMART, Solution for Smart Cities



**H-SMART** – using wireless protocols **LoRaWAN**, **Sigfox** and **NB-IoT** in low-power wide-area networks (**LPWAN**).

# INSTAR H-SMART, Solution for Smart Cities



**SMART CITY**  
Smart Grid & Internet of Things

# INSTAR H-SMART, Solution for Smart Cities



**LMS STREET** is a simple street lighting control hardware and software system solution using **LoRaWAN** protocol. It is possible to combine **LMS STREET** with **LMS DALI** for flexible use in industrial halls, warehouses, office buildings, shopping centres, sports facilities, hospitals, schools, services, hotels, restaurants, wellness facilities. You create intelligent solutions with **LMS STREET** and **LMS DALI** systems for any city around the globe.



**ENERGY** – Smart grids and metering utilities (electricity, water, gas). **Energy Monitoring, Metering and Targeting (MM&T)**. Based on the principle that *‘you cannot manage what you cannot measure’*.



**PARKING** – Integrated vehicle parking management system. Configurable parking policy for on- and off-street, offers a wide range of designs.



**WASTE MANAGEMENT** – Smart IoT sensors and software apps ready to manage your waste smarter. Sophisticated and efficient tool to manage waste, monitor bins with sensors, and optimize capacity and collection routes.

# INSTAR H-SMART, Solution for Smart Cities



**ELECTRIC VEHICLE CHARGING STATION** - complex charging solution. Covers everything from chargers to billing and grid management in an integrated package.



**ELECTRIC BIKE CHARGING KIOSK** - electric bicycle charging kiosk. Lockable cell phone and tablet charging station. Public Wi-Fi access point.



**AIR QUALITY** – Air quality technology - scans air pollution in the town square and pollution exposure for pedestrians, bikers, drivers and local residents.

# **INSTAR** ENERGIS, Solution for Smart Cities

**Efficiency Improvement,  
Increase of Productivity,  
Costs Savings.**



# INSTAR ENERGIS, Solution for Smart Cities



Implementing of its own software product ENERGIS to integrate relevant data sources.

Analyzing historical data and modelling business processes.

Setting up KPIs, benchmarking, optimizing, forecasting and application of improvement measures (BI).

Evaluating of costs savings.

ENERGIS is a global software tool for the support of energy management to optimize operational costs in real time.

ENERGY  
EFFICIENCY



# INSTAR ENERGIS, Solution for Smart Cities

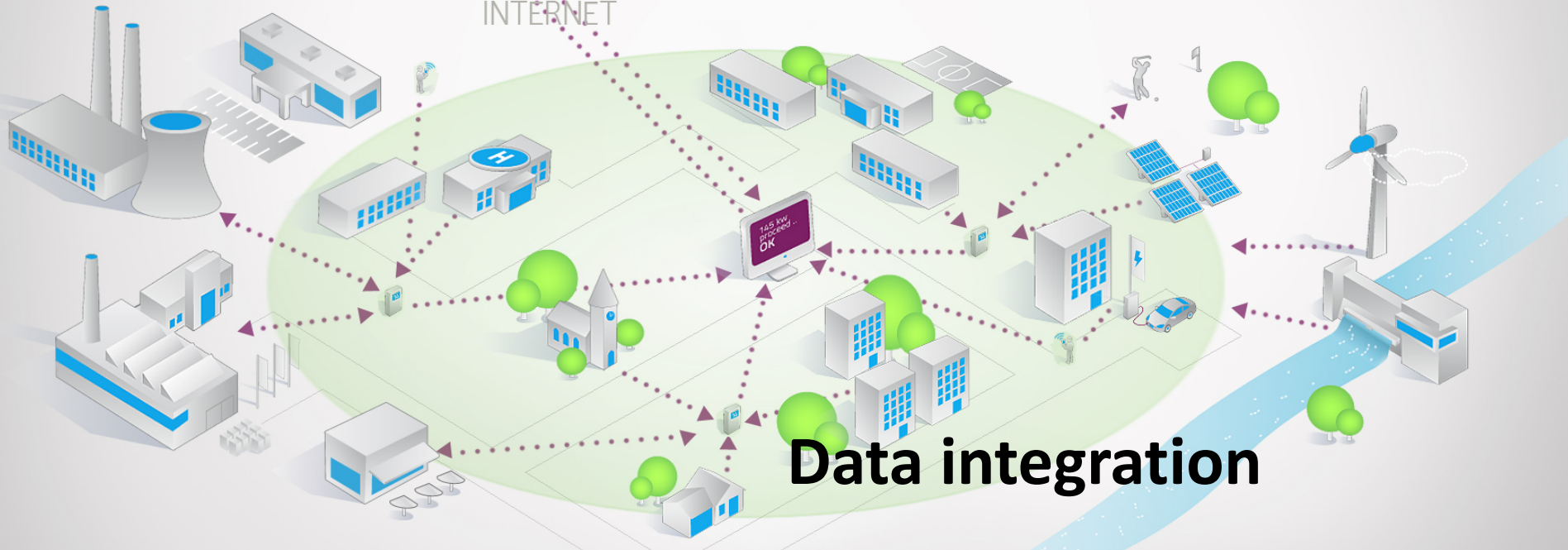
Data processing

Data analytics/reporting



INTERNET

INTERNET



Data integration

# INSTAR Reference solutions



Town **SVITAVKA**



Municipality **CHVALOVICE**



Municipality **HORNÍ SUCHA**



Tomas Bata University in **ZLÍN**



Institute of Clinical and Experimental  
Medicine in **PRAGUE**

# INSTAR - Contacts



HQ

**INSTAR ITS Ostrava a.s.**, Varsavska 1144/48, 709 00 Ostrava, Czech Republic  
+420 596 625 112, [info@instarna.com](mailto:info@instarna.com), [www.instarna.com](http://www.instarna.com), [www.instarits.com](http://www.instarits.com)

## International Offices

11654 Plaza America Dr, Reston, VA, USA  
[info@instarna.com](mailto:info@instarna.com), [www.instarna.com](http://www.instarna.com)

1-11-4-923 Umeda, Osaka, Japan  
[info@instar.jp](mailto:info@instar.jp), [www.instar.jp](http://www.instar.jp)

Am Forsthaus 9, Höchststadt a.d. Aisch, Germany  
[info@instarits.eu](mailto:info@instarits.eu), [www.instarits.eu](http://www.instarits.eu)