

# advanticsys Digital Transformation & R&D Partner

Connect – Collect – Analyze - Optimize

www.advanticsys.com

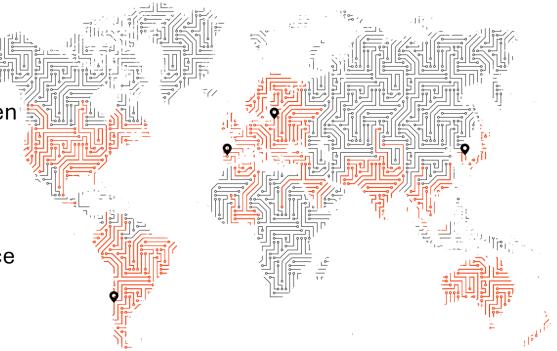
### Our company



 Since 2009, Advanticsys has been creating digital transformation products and solutions

 Focused on industry, energy, agriculture, and environment

Operating in a global marketplace



120000+

MONITORING DEVICES SOLD

1000+

CUSTOMERS

42

COUNTRIES

### Who we are



#### Innovative Industrial IoT and Engineering Expertise

From monitoring devices and cloud platforms to custom engineering and electronics design, we offer tailored IoT solutions to meet your exact needs



#### **Industrial Monitoring**

Our Dataloggers, Controllers, wireless bridges and Data Concentrators enable powerful monitoring and control solutions in any market segment



#### Concordia Cloud Platform

Deliver complete monitoring and control projects with our IoT Cloud Platform. Any device or data source can be connected. Multiple industrial and IoT protocols supported.



#### **Engineering services**

Design and develop complete projects from conception until set up and even maintenance



### Protocols and APIs integration

Third party proprietary protocols can be integrated in any of our products



#### Firmware development

Any feature missing in our products? Tell us what you need and we will develop it



#### **Electronics design**

We design the electronic device you need meeting technical and economical requirements

### Who we are



# We develop hardware, big data cloud software and AI-based data analysis in several verticals





Energy management solutions. Smart control applications



Environment

Air and water quality monitoring projects worldwide



Green Energy

Wind and Solar PV plants data collection and analysis



### **Industry**

Remote management. Electricity and heating metering



#### Agriculture

Monitoring and control of greenhouse indoor climate





Defense

Sensor fusion, system integration for naval defense



## Background in EU projects

- Since 2009, advanticsys has a proven track record in EUfunded Projects
- Participation in 100+ proposals -> 23 successfully funded
- Projects mainly focused on:
  - Industry 4.0
  - Sustainable and Smart mobility
  - Energy management in Buildings / Smart grid
  - Environmental monitoring

Energy Game for Awareness of energy efficiency in social housing communities	EnerGAware	H2020	
PALAEMON – A holistic passenger ship evacuation and rescue ecosystem		H2020	
Monitoring devices for overall FITness of Drivers	FITDRIVE	H2020	
		112020	
Smart Energy Services Integrating the Multiple Benefits from Improving the	SENSEI	H2020	
Energy Efficiency of the European Building Stock  Demand Response - Residential Innovation for a Sustainable Energy	SENSEI	H2U2U	
system	DR-RISE	HORIZON	
RE-manufaCturing and Refurbishment LArge Industrial equipMent	RECLAIM	H2020	
An Advanced Circular and Agile Manufacturing Ecosystem based on rapid			
reconfigurable manufacturing process and individualized consumer			
preferences	KYKLOS 4.0	H2020	
Zero-defect manufacturing for green transition in Europe	ENGINE	HORIZON	
Climate and cultural based design and market valuable technology			
solutions for Plus Energy Houses	CULTURAL-E	H2020	
PLants Employed As SEnsor Devices	PLEASED	FP7	
Evaluation of RF-based Indoor Localization Solutions for the Future			
Internet	EVARILOS	FP7	
An ubiquitous embedded systems framework for energy-aware buildings			
using activity and context knowledge	GreenerBuildings	FP7	
INTelligent systems for Energy Prosumer buildIngs at District level	INTrEPID	FP7	
Water analytics and Intelligent Sensing for Demand Optimised			
Management	WISDOM	FP7	
ODYSSEUS	ODYSSEUS	FP7	
A holistic water ecosystem for digitisation of urban water sector	NAIADES	H2020	
Integrated intelligent sensor system for improved security of water supply	ISIS	FP7	
European PhD Hub	European PhD Hub	EPLUS	
Integrated air quality sensor for energy efficient environment control	INTASENSE	FP7	
WeSenselT: Citizen Observatory of Water	WeSenselt	FP7	
Zero-impact innovative technology in forest plant production	Zephyr	FP7	
A Novel Decision Support System for Intelligent Maintenance	iMain	FP7	
Embedded Intelligent Controls for Buildings with Renewable Generation			
and Storage	ENCOURAGE	FP7	



## **Technological Capabilities**

- IoT hardware development (gateways, sensors, edge computing)
- Communication protocols integration
- Cloud platforms (Concordia) for real-time analytics and control
- Data analytics & forecasting (energy, environmental, operational)
- Digital twins, decision support systems
- Integration with BIM, SCADA, and third-party systems









### Concordia Cloud Platform



Our Data Backbone used in multiple EU projects



#### **Seamless Device Integration**

Effortlessly connect and integrate any device using our versatile protocol adapters, ensuring compatibility across diverse IoT ecosystems



#### **Real-Time Data Contextualization**

Bring IoT data into your business context, digitally representing the physical world for enhanced decision-making and process automation



#### Secure & Low-Latency Data Access

Maintain strict data segregation while providing real-time, low-latency access to operational IoT data for missioncritical applications



#### **Advanced Analytics & Insights**

Convert raw IoT data into meaningful business metrics and actionable insights using scalable analytics models for enhanced operational efficiency



### Data Fusion & Highly Customizable Dashboards

Integrate and harmonize data from multiple sources while leveraging customizable dashboards to visualize insights tailored to your needs



#### Advanced Reporting & ERP/API Connectivity

Seamlessly integrate IoT data with your ERP systems or internal APIs, ensuring smooth data exchange and enabling in-depth reporting for strategic business insights

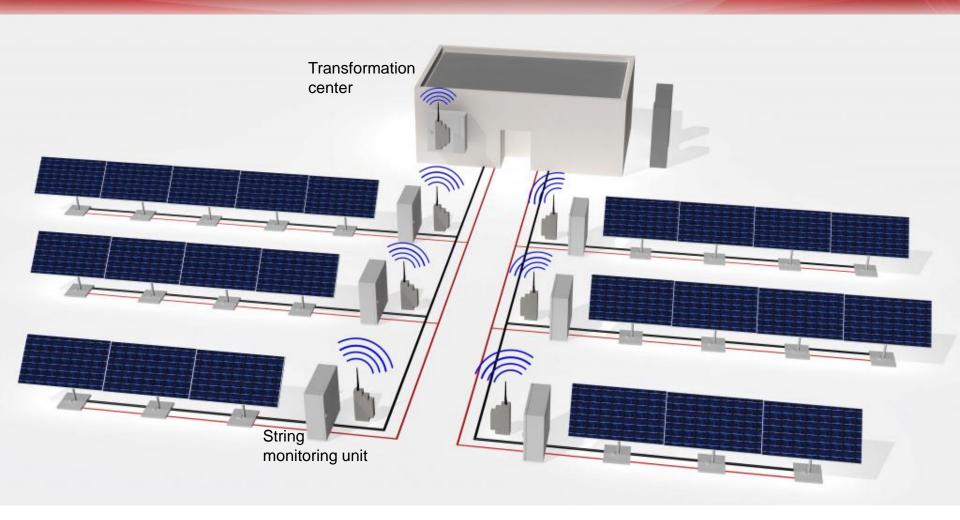
### Selected solutions



- Solar PV Plants Monitoring
- Building Energy Management
- District Heating Monitoring
- Smart Agriculture & Water Monitoring

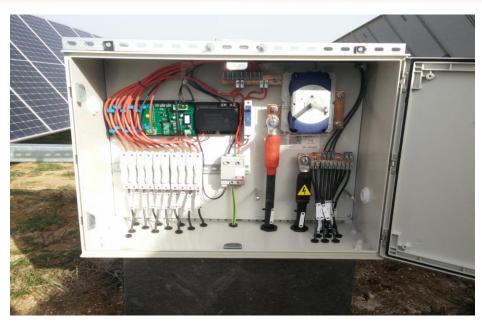


# **Solar PV Plants Monitoring**





# Solar PV Plants Monitoring



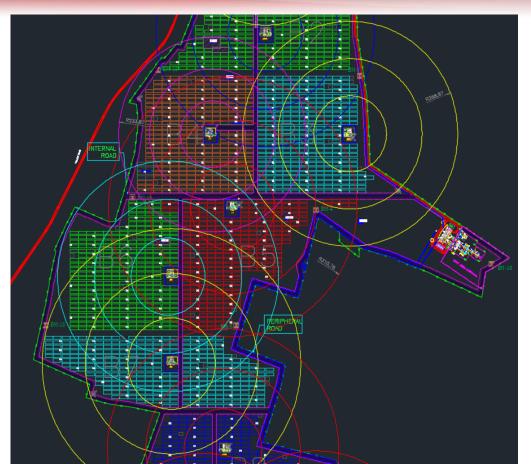
- IEC 61724-1-2021 Class A (High accuracy) complaint
- RF communication 868-915 MHz
- Data sending via RF to any Modbus RTU equipment
- Up to 64 slaves
- Low costs and wiring effort, as an additional power supply unit is not required in the device connection box
- Easy integration in monitoring systems, thanks to Modbus/RTU communication
- To be installed in each inverter room
- CE and ANATEL certification







# Solar PV Plants Monitoring





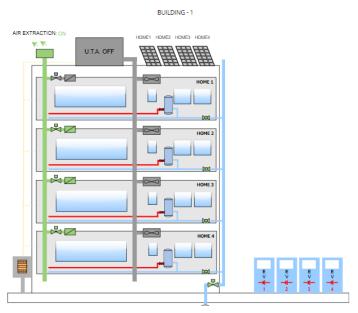


3000 MW monitored since 2019 in Spain, India, Chile, Turkey, Australia, UK, USA

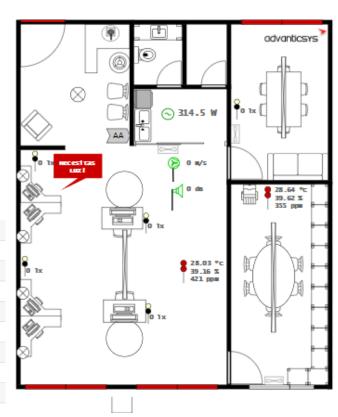


# **Building Energy Management**

- 1000+ buildings monitored across Europe and South America
- Energy monitoring, forecasting, and SCADA-based control
- Integration with building automation systems



	CONTROL SYSTEM	
U.T.A	OFF	0 /
General Water Valve	ON	0 /
ColdWater Home1 Valve	OFF	0 /
ColdWater Home2 Valve	ON	• /
ColdWater Home3 Valve	ON	0 /
ColdWater Home4 Valve	ON	0 /
Hot Water Home1 Valve	ON	0 /
Hot Water Home2 Valve	ON	•
Hot Water Home3 Valve	ON	•
Hot Water Home4 Valve	ON	•
Cultural - E Main Power	ON	•
Cultural - E ElecVehic1	ON	•
Cultural - E ElecVehic2	OFF	0 /
Cultural - E ElecVehic3	OFF	•





# **Building Energy Management**

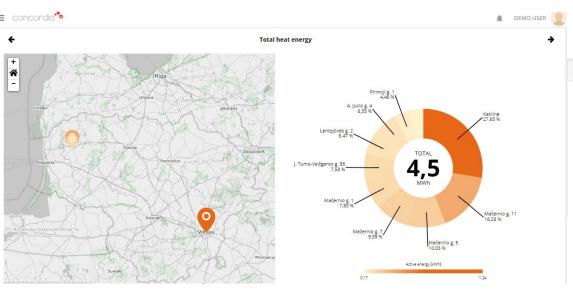


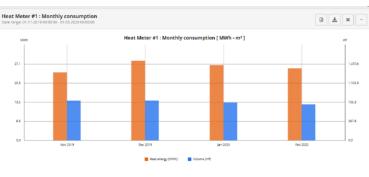


## **District Heating monitoring**

Real-time monitoring of heat meters temperatures and volume. Data analytics, forecasting and billing services









### **Agriculture and Water**

- Real-time monitoring of pressure and temperature, with IP68-rated rugged design
- Data transmission via FTP and MQTT using 4G connectivity and open formats (JSON, CSV)
- Integration with Concordia Cloud Platform for centralized visualization, alerts, and analysis
- Enhanced operational efficiency, regulatory oversight, and reduced field intervention







### advanticsys

### Let's Collaborate

- We bring market-ready technologies to research consortia
- Strong track record in Horizon Europe, LIFE, and international R&D projects.
- Flexible and agile team with deep experience in hardware, software, and cloud integration.
- Actively seeking new partnerships to co-develop innovative solutions for energy, industry, mobility and sustainability.
- Expertise from sensors to cloud, from data to decisionmaking



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