



FUEL SAVE CONTROL SYSTEM

by P.U.R.E., Ltd.



trakčné pohony

Zelená energia



vodné elektrárne



fotovoltaika



veterné elektrárne



elektrické pohony

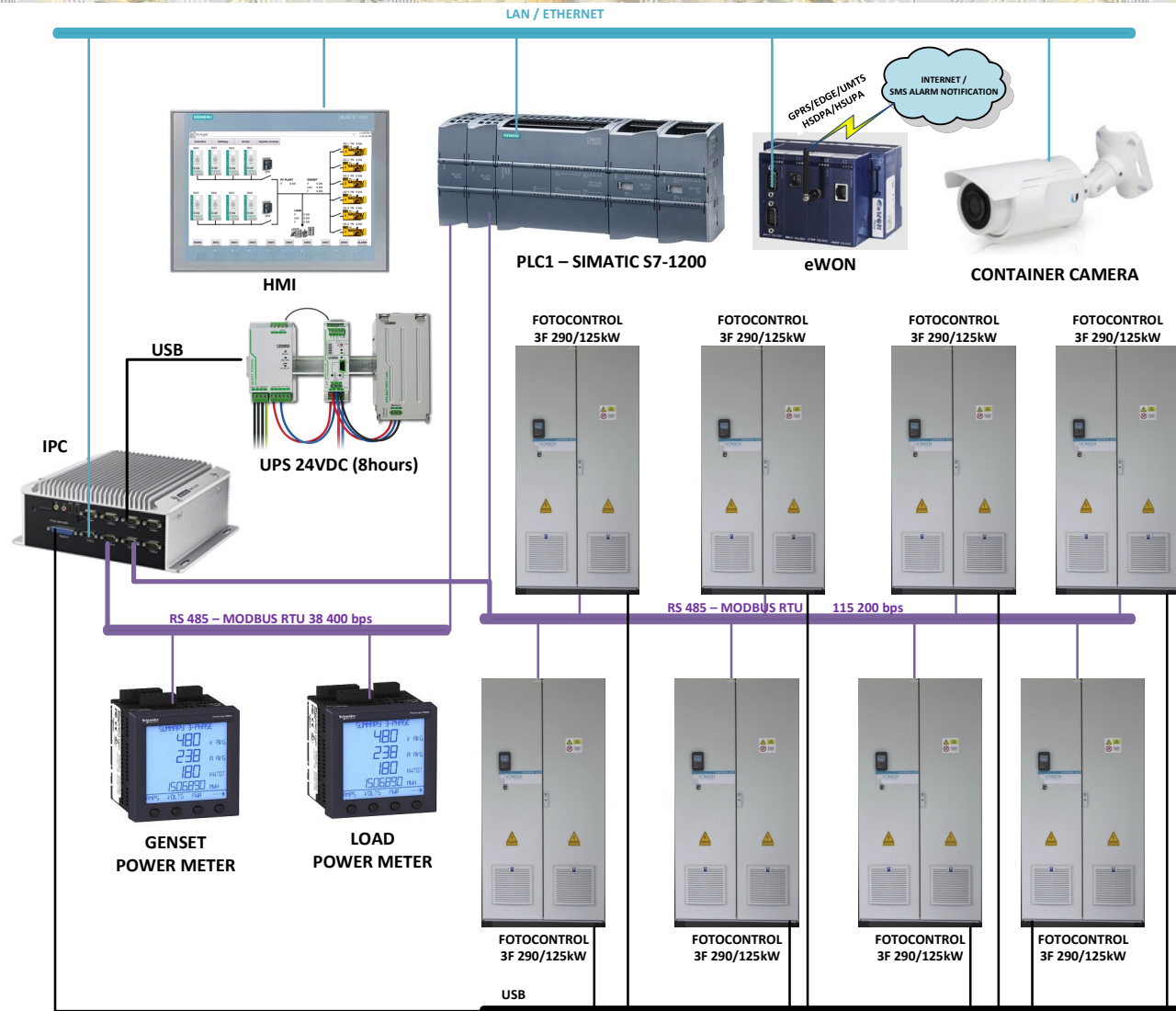


umelé siete



VONSCH®

FSCS Block Diagram



FSCS`s basic functions

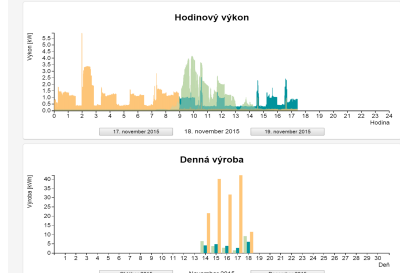
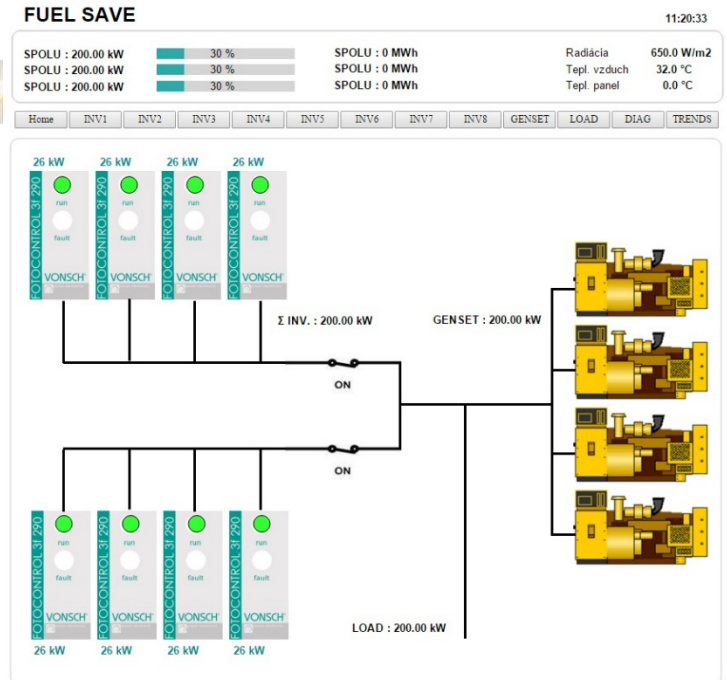


- **Limit the power of a photovoltaic plant according to geneset**
 - Load Power metering
 - GenSet Power metering
- **Secure (VPN) connection to the internet via LAN network**
- **Alarm management with SMS and EMAIL notification**
- **Uninterruptible Power Supply 24VDC for control system and container lightening, up to 8 hours backup time**

FSCS`s basic functions

Web visualization (HTML5) with the following information:

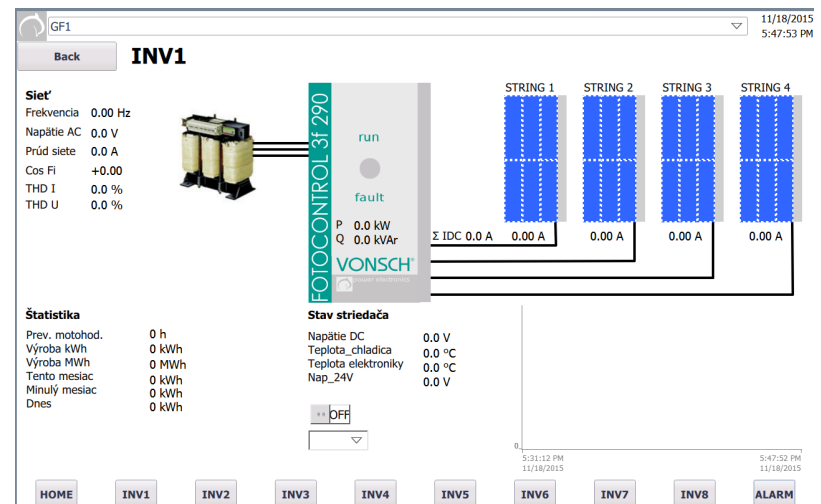
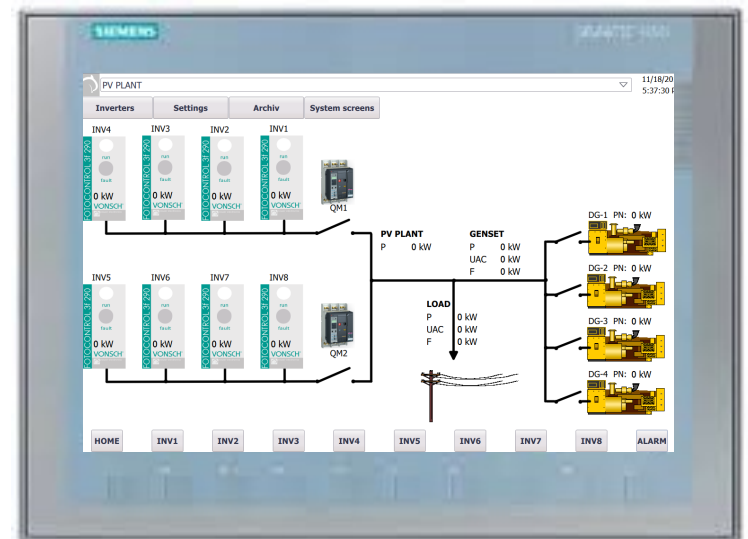
- online status of devices, instant data values with one second period of renewal
- long-term historical archive of operational status and trends, and energy balance (the data are archived locally independent of the Internet connection)
- The images from cameras mounted in the container



FSCS`s basic functions

Local visualization

- SIEMENS color touchscreen 12" display located on the control cabinet FSCS
- Information about the current status of photovoltaic power plant
- Information about the individual inverters, including connecting the strings
- Current alarms and archive of alarms
- On each inverter is the door-mounted panel with graphic display



PLC – SIMATIC S7HMI

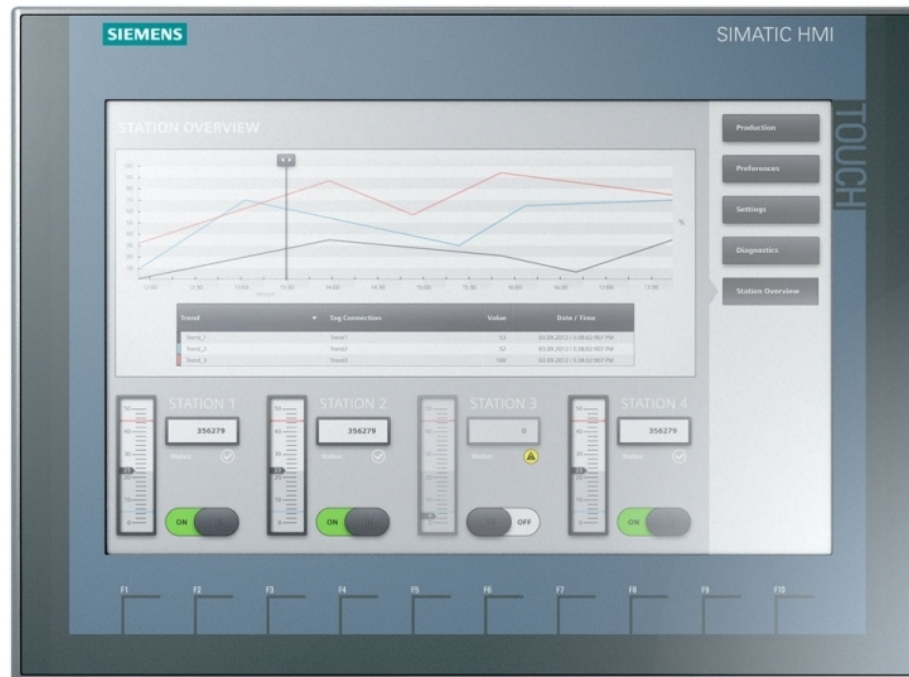


- **FUEL SAVE ALGORITHM**
- **MODBUS RTU communication with**
 - 8 x INVERTERS
 - 2 x PM5300 Schneider
- **Ethernet communication with**
 - HMI Touch panel
 - eWON - Router
- **DIGITAL Input and output signals**

SIEMENS

SIMATIC HMI KTP1200 BASIC

- Local (inside of container) visualisation
- 12 inch TFT display, 64K colors



eWON Flexy

- **Modular Industrial M2M Router and Data Gateway**
- **Alarm Management**
 - With the alarm system, you can configure your eWON to notify users of alarm conditions from web pages, as an email in your inbox, as a SMS on your mobile phone
- **Data logging**
 - The Flexy series are able to log data and display a historical view of tag values.
- **Task planner**
 - With this tool, it is possible to schedule actions like sending an email, a SMS, a SNMP trap or a file by FTP

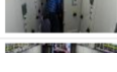


CONTAINER CAMERA

- Container Live View
 - <https://fsipc:7443/cameras>
- Motion detection recordings archive



DATE RANGE	
 Today	 Last Week
 Last Month	
From	2015-11-18 00:00
To	2015-11-18 18:30
CAMERAS	
Select Camera	
All Cameras	
TYPE	
☒ Motion Recordings	
☒ Full Time Recordings	

	CAMERA
☐	 UVC
☐	 UVC
☐	 UVC
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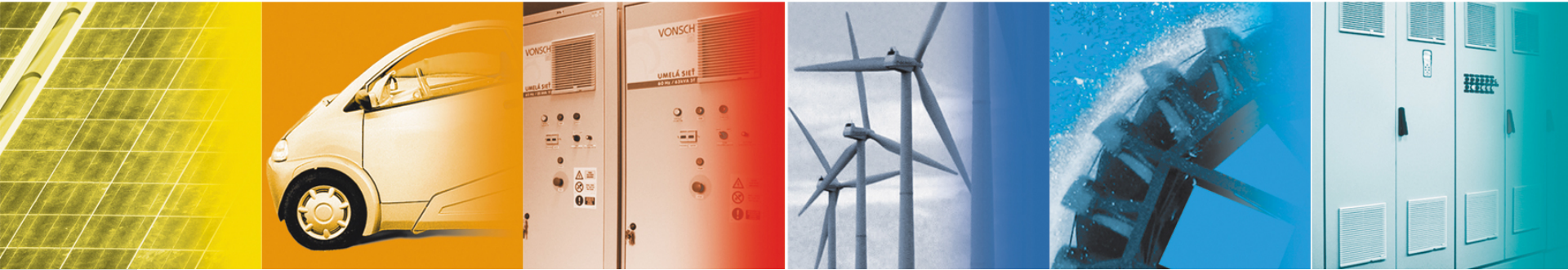


IPC

- **FTP**
- **MYSQL SERVER**
- **CAMERA ARCHIVE STORAGE**
- **PV PLANT DATA STORAGE**
- **REMOTE DIAGNOSTIC SOFTWARE FOR**
 - **PM5300**
 - **FOTOCONTROL 125**
 - **QUINT UPS**
 - **CAMERA**
 - **MODBUS RTU Diagnostic**



p.u.r.e. 



Thank *you for your attention*