

The  
AutoLog<sup>®</sup>  
Family  
presents



## AutoLog<sup>®</sup> Success Story



We've got it under control  
Sophisticated Control Technology

Solar Energy Supervision, AutoLog<sup>®</sup> TETRA RTU



FF-AUTOMATION OY



## Description



In Helsinki area the first Finnish apartment building is using solar energy. Solar panels are integrated in the balconies. The complete solar power capacity is 24 kW. Produced power is supplied into Helsinki Energy's electricity network.

AutoLog® TETRA RTU was used to send measurement data wirelessly using TETRA network into Internet database.

The project was carried out together with Helsinki Energy company and it is part of the EU's PV-Nord project.



## TETRA Supervision

Measurement data is send once per minute intervals to Internet server database via TETRA network.

All the measurement data can be viewed from the Internet...

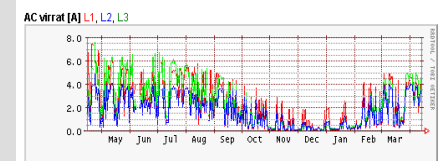
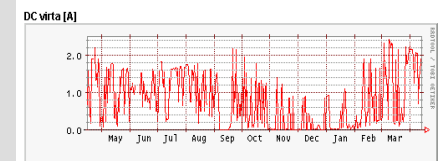
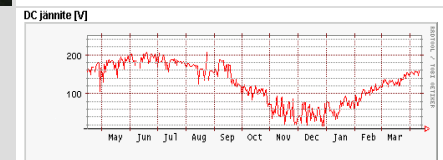
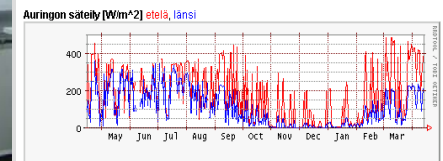
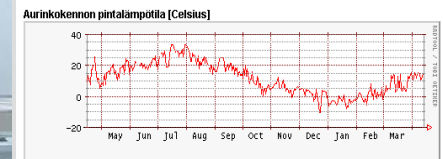
<http://www.helsinginenergia.fi/sahko/aurinkosahkotuloksia.asp>

The data transmission via TETRA network has been working without any failures or interrupts now (April 2004) more than 1 year.



## Measurement data

- temperature
- humidity
- panel temperature
- solar radiation
- DC voltage
- AC currents and voltages
- powers (AC/DC)
- phase powers
- wind direction
- wind velocity





### Used equipment

AutoLog® 20 TETRA RTU with EXA 8/4 analog expansion board was used. TETRA RTU uses TETRA SDS messages for wireless data transmission.

### About TETRA

TETRA technology is a world standard published by ETSI for digital mobile trunking networks. TETRA networks offer secure, digital mobile communication for professional organizations such as oil and gas companies, utilities, transportation and public safety and security agencies (police, emergency, civil defence, security services, etc.). Data communication improves field operations by allowing users to access databases via their radios.





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