AutoLog® SaveLight™ – Street Light Management System
FF-Automation Oy is a Finnish company and it has almost 40 years expertise in designing and manufacturing own cost-effective remote monitoring and controlling solutions. Our main focus is on wireless automation products which allows remote monitoring and controlling of different kind of Oil & Gas, and municipal applications like street lights, water distribution pumps etc.

Our AutoLog® product family is giving the complete solution from field I/O level to Remote Terminal Units to communication solutions to supervision SCADA systems. AutoLog products are using the latest communication methods like GSM/GPRS, Radio, TETRA, Ethernet, WLAN, TCP/IP, Wi-Fi etc. We have released new products like GSM-RTUs, TETRA-RTUs and Wireless I/O Sensor Networks - first on the market!

FF-Automation’s typical clients are city municipals, oil & gas corporations, Machine manufacturers and many others.
FF-Automation’s AutoLog® Family Products

- **AutoLog® GSM-RTUs**
- **AutoLog® RTU**
- **AutoLog® Wireless**
- **AutoLog® HMI**
- **AutoLog® ControlMan IoT SCADA**
- **AutoLog® PLC**
- **AutoLog® Radio Modem**
- **AutoLog® OEM**
SaveLight gives **SUBSTANTIAL ENERGY AND GRID LOAD SAVINGS** (up to 35%) by optimising burning times and dimming at off-peak traffic hours.

It gives **SUBSTANTIAL MAINTENANCE COST SAVINGS** by detecting burned lamps.

It gives **LESS STRESS ON TRANSFORMERS** by lamps dimming and optimizing in peak consumption periods.

It allows **REMOTE STREET LIGHTS CONTROL** so lights can be easily controlled ON/OFF on special situations.

It gives web based, multi featured interface for managing street lights.

SaveLight gives centralized and **SHARED INFORMATION** about Street lights. Burning hours, energy consumptions, broken lights etc. can be turned into graphical reports.

Lowered energy consumption leads also **LOWERED CO₂ EMISSIONS**.
USER CASE - ELECTRICITY SAVINGS

BEFORE:
- The street lights were simply switched on at the afternoon and off in the morning.
- No dimming at off-peak traffic hours.
- No information from the burned lamps - uncontrolled maintenance.

AFTER:
- The street lights are now dimmed to 70% power at early night and early morning.
- Some of the lights are kept off over the deepest night.
- Total savings in electricity cost is about 30-35% with the defined parameters.
USER CASE – GRID OVERLOAD

BEFORE:
- The street light is a big load for power grid.
- Grid and transformers may be under serious STRESS when street lights are on.
- When number of street lights is increasing, changing of transformers is mandatory.
- It leads to huge equipment and installation costs.
- Grid transformers are loaded 100% during all night long.

AFTER SaveLight™ implementation:
- With smart dimming and remote control by SaveLight™ average grid load is decreased.
- It is possible to add new street lights without changing power grid transformers.
- Remote voltage and current measurements.
- No need to change substation transformers.
- Remote switchoff or dimming of needless street light chains to reduce grid load.
AutoLog® SaveLight™ – Street Light Management System

CENTRALIZED ARCHITECTURE:

Centralized solution is easy to install and requires less equipments than pole-based solution.

One SaveLight™ Control Unit can control up to 50-500 lamps (3x25kW), depending on the other central equipments and lamp types.

AutoLog SaveLight™ servers collects and shares the information to authorized users. SaveLight servers are hosted by the best proven Internet hosting companies 24/7/365.

System is easily expanded and maintained. New configurations can be made remotely.

System allows easy creation of several user groups with different user levels.

One SaveLight™ system can be expanded unlimitedly by adding new servers.
SaveLight Web Interface is based on well proven AutoLog ControlMan service. The servers are hosted by Internet hosting companies 24 / 7 / 365.

SaveLight Web Interface can be used from any PC or device which supports internet Web- or mobile browsing. Only authorized users can use the service. Connection is using secure https:// protocol.

SaveLight Web Interface can be maintained remotely. New control units, users, groups, views, reports etc. can be added and configured remotely.

SaveLight Web Interface gives instant status of the street lights on the dynamic map. The problems like burned lamps or fuses are automatically detected. Alarms can be automatically forwarded to servicemen’s cell phones or e-mails.

The multi-featured interface has alarm-, trend- and process views, reports and much more!
SaveLight™

Control system is able to decrease substation transformers's load by using smart dimming (street light supply voltage) according to pre-programmed schedules, illumination sensor or manual command.

- Control room commands;
- Maps, Graphs, Reports.

- Alarm reports;
- Manual commands.

Overloaded Substation transformers

SaveLight™ Control unit with dimming

Low (180 - 230VAC) Street light voltage
AutoLog® SaveLight™ – Street Light Management System

- Input fuses and switches
- RMS voltage and current measurements
- Dimming equipment
- Contactors & Dimming Control

L1, L2, L3

- Illumination sensor
- Traffic sensor etc.

Street light groups: 3 x 100 lamps (200W) = 300 lamps

SaveLight™ control system can be installed inside existing electrical distribution cabinets or be supplied as stand-alone unit.
AutoLog® SaveLight™ – Street Light Management System

Many installation variants with full feature range to be suitable for any application.

GROUND INSTALLATION CABINET: 4CG-FS-50/100A
Dimming transformers. Up to 3 x 100A current and voltage measurements. Room for power meter. Illumination sensor.

FEEDER PILLAR INSTALLATION CABINET: 4CG-PM-50/100A
Up to 3 x 100A phases current and voltage measurements Room for power meter. Illumination sensor.

FEEDER PILLAR ALU UNIT: Feeder Pillar 1CG-ALU-50/100A
Up to 3 x 100A phases current and voltage measurements Illumination sensor.

CONTROL UNIT: AL GSM-4, AL GSM-16AGR
To be embedded into existing cabinet.

Low-Cost GSM control unit
Automatic control with illumination sensor.
References of FF-Automation Oy Autolog® Savelight™ installations in Finnish cities:


Other installations have been done in Sweden, Middle east and Asia regions.
FF-Automation has a worldwide network of AutoLog system integrators and distributors. We are also constantly seeking more new co-operation partners, representatives and software partners.
For more information about FF-Automation and the AutoLog® range of control products and automation solutions, please open www.ff-automation.com

Head Office:
Eräkuja 2, 01600 Vantaa, Finland
tel: +358 10 2190 500
fax: +358 3 5846 711
e-mail: info@ff-automation.com

Factory:
Valkeakoski, Finland