



Smart Street lighting System





lumoflex



Lumoflex Smart Street lighting System is complete outdoor lighting control solution. It consists of hardware to control street light operation and software to monitor and adjust system remotely.

The whole solution can be separated into three major parts:

- **Lumoflex-LCBC: Lumoflex Lighting Control Box Controller (LCBC)** for controlling luminaire feeders and dimming lines
- **Lumoflex-LC: Lumoflex Lighting Controller (LC)** for individual luminaires which is operating in wireless mesh network
- **Lumoflex-CMS: Cloud based Lumoflex Central Managemnt Software (CMS)** which is general interaction point for user through Map based Graphical User Interface. Lumoflex-CMS gives a possibility to monitor and adjust the hardware of the system - cabinet and luminaire controllers

The complete system is designed to be robust and reliable. For this purpose operative data processing is transferred to end devices. It means that whenever possible, operating rules are saved into the hardware. Such an approach reduces the major problem which occurs with remote management systems – system unreliability because of communication failures.



Martem is the provider of remote control solutions for power grid operation monitoring and control with more than 25 years of experience. Lumoflex-LCBC is a product which is based on the years of remote control devices production and engineering experience.

We are focused in design and system integration. Our production work is done by subcontractors. Main clients are infrastructure companies, substation construction and montage companies. Martem AS is certified with ISO 9001.



www.martem.eu

Tel: +372 63 97 979

martem@martem.eu



Euroopa Liit
Euroopa
Regionaalarengu Fond



Eesti
tuleviku heaks



lumoflex



Lumoflex-LCBC features

- 2G, 3G, 4G connection
- VPN secure communication channels
- Standard communication protocols for integration
- Good choice for solutions where older and newer individually controlled luminaires are in same control network
- Autonomous control without need of permanent connection to control center based on internal astronomical clock and sensors
- Connections to energy meters and transducers
- Historical data is saved in controller
- More than 10 sec. operation after power outage for sending last signals
- Charger for optional battery
- Alarms via SMS
- SNMP (Simple Network Management Protocol) for monitoring
- Time synchronizing from network with NTP (Network Time Protocol)



Lumoflex-LC features

- On/Off switching based on sunset/sunrise or on ambient light level sensors
- Dimming schedule based on Real Time Clock
- Wireless communication in a flat mesh network
- Direct wireless communication with external sensors
- Luminaire failure report via SMS/e-mail
- Power consumption monitoring
- Streetlight operation rules editable from Lumoflex-CMS



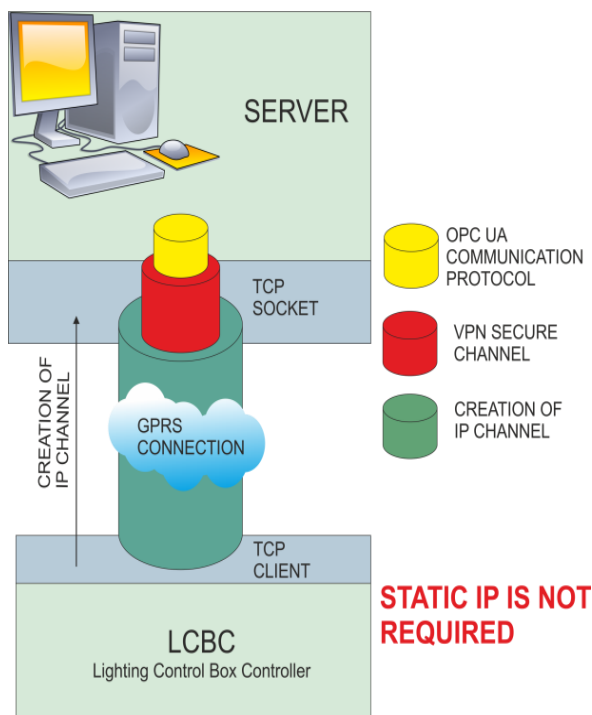
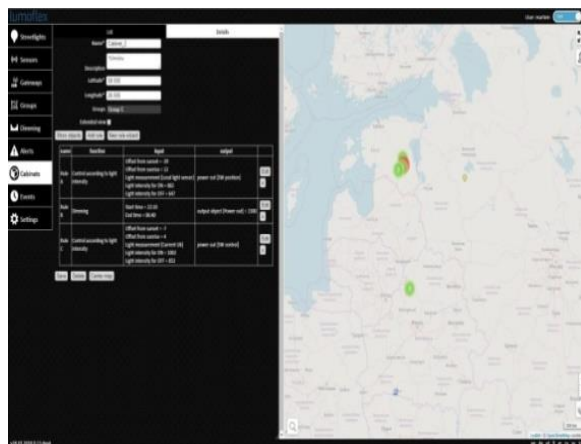


Lumoflex Central Management Software (CMS) functions and features

Lumoflex-CMS is intuitive and easy to use cloud-based central management software for complete street light installation including control cabinets, individual light points and sensors. Lumoflex-CMS has graphical map based user interface.

Lumoflex-CMS contains different views for street light operation monitoring and adjustment. It has possibility to create or edit different lighting rules, cabinets, users, etc.:

- **Cabinets** - view the cabinets states and modify cabinets parameters.
- **Cabinet groups** – define cabinet groups and apply lighting operation rules to groups.
- **Cabinet rules** – create and edit lighting rules with different control methods.
- **Cabinet Events** – view and filter the events, including alarms.
- **Alarms** – view, filter and acknowledge the alarms. Send alarms via SMS and e-mail.
- **Streetlights** – additional detailed information about streetlights.
- **Sensors** - additional detailed information about sensors.
- **Groups** – define groups of individually controlled streetlights and apply rules.
- **Dimming** – create and modify dimming rules for individually controlled streetlight groups.
- **Settings** – user accounts and various common system wide settings





lumoflex



Our clients talking about MARTEM AS

"When we tested competing system from Germany it took three days for their engineers to configure the system to work. It was just ten street lights. When we installed 580 luminaires with Lumoflex-LC controllers, it was just connecting power cables, and everything worked."

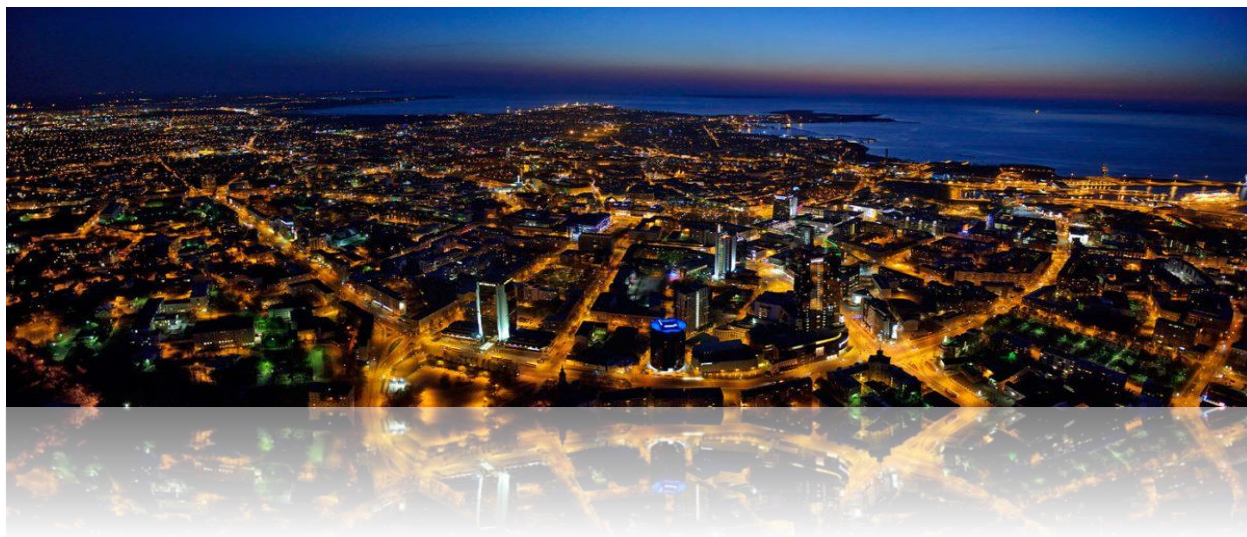
*Tõnis Tasa, Chief Engineer of
KH Energia-Konsult AS*

"We have cooperated with MARTEM AS several years. MARTEM AS is a trustful company - they have been on the market over 25 years and their products are reliable and conform widely used other manufacturer's devices. As well if there are needs for a customized systems then MARTEM AS can provide it. We suggest to cooperate with MARTEM AS!"

*Erkki Varrik, Engineer of
Leonhard Weiss Energy AS*

"We have cooperated with MARTEM AS over 20 years, which means that we are satisfied with their products and services. We are using MARTEM AS products due to user friendliness, reliability and their flexibility in finding solutions. We can say that MARTEM AS is a good choice for cooperation"

*Uģis Kokenbergs, Senior
Systems Control Engineer,
A/S Sadales tīkls*



CONTACT US:

+372 63 97 979

martem@martem.eu



www.martem.eu

Tel: +372 63 97 979

martem@martem.eu

