

MAKES
LIGHTING
INTELLIGENT

 **iLUMNET**

BENEFITS

FUTURE PROOF

Easily expand and upgrade your system
Update your system and devices wirelessly

OPTIMAL AND PURPOSEFUL LIGHTING - PLEASANT LIVING ENVIRONMENT

Easily tailored to different applications

FAST PAYBACK WITH INCREASED ENERGY EFFICIENCY

Energy consumption typically less than 50% of a comparable fixed LED lighting system

READY AND TESTED SOLUTION FOR LUMINAIRE MANUFACTURERS

No development investments needed

EFFICIENT LIGHTING SYSTEM MANAGEMENT

Online reporting
Easy remote monitoring and control

EASY AND COST-EFFECTIVE DEPLOYMENT

No additional cabling
Deployment and changes via a web interface

CONNECTIVITY WITH IoT

Ready for SmartCity, Smart Grids, Sensing and BigData

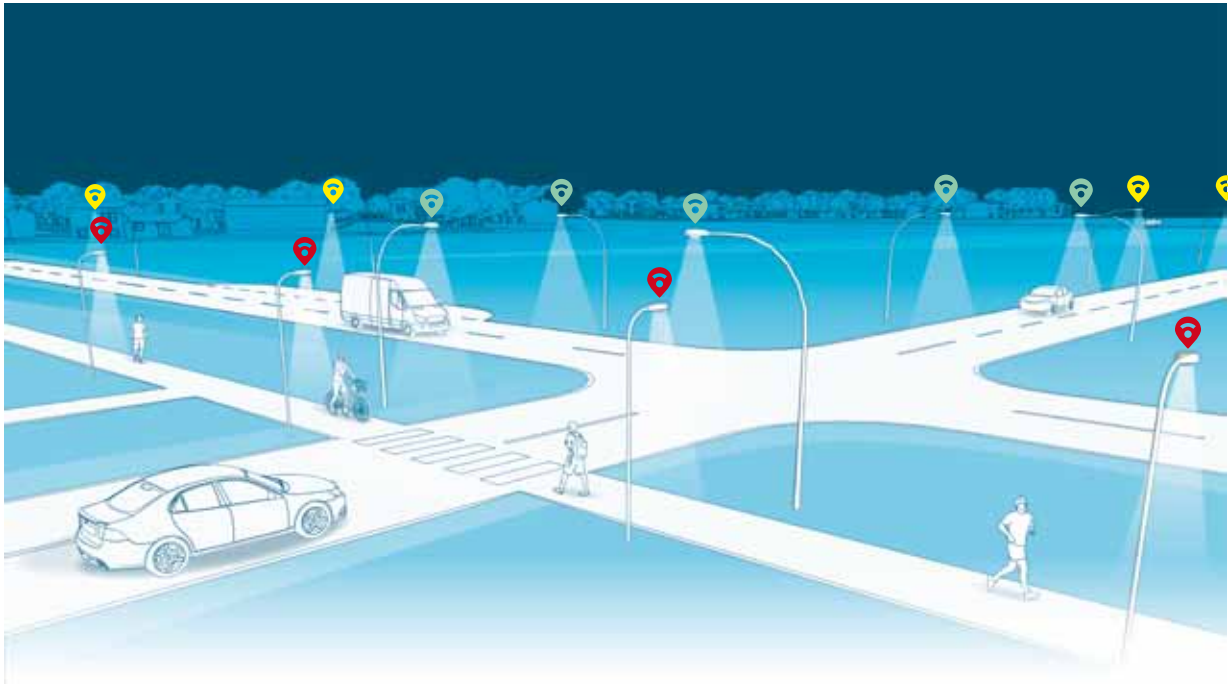





SOLUTIONS

The iLUMNET system is widely applicable to different lighting environments. Combinations of iLUMNET-ready luminaires and iLUMNET devices create possibilities to a wide range of solutions. Also other commercial devices and DALI or 1-10V compatible luminaires can be added to the system when iCONTROL is used with them.

Multiple live installations with the iLUMNET system have been installed in Finland and Netherlands.





-  Group 1: Road
-  Group 2: Intersection
-  Group 3: Pedestrian path

Luminaires can be grouped for example to different areas of the street environment. The intersection can be defined as one group, and it can have higher lighting levels compared to others parts of the street.

Different control devices and sensors can be added to the system to provide control data. For example, at the main road, a radar can be used in addition to timed lighting profiles. At the pedestrian path, sensors can be used to create illumination that adjusts as needed.

iLUMNET SYSTEM

iLUMNET Lighting System is an IoT based system that automatically controls luminaires according to set profile.

System Management and commissioning is centralized to LumoScope cloud service that can be used with any device via a web browser.

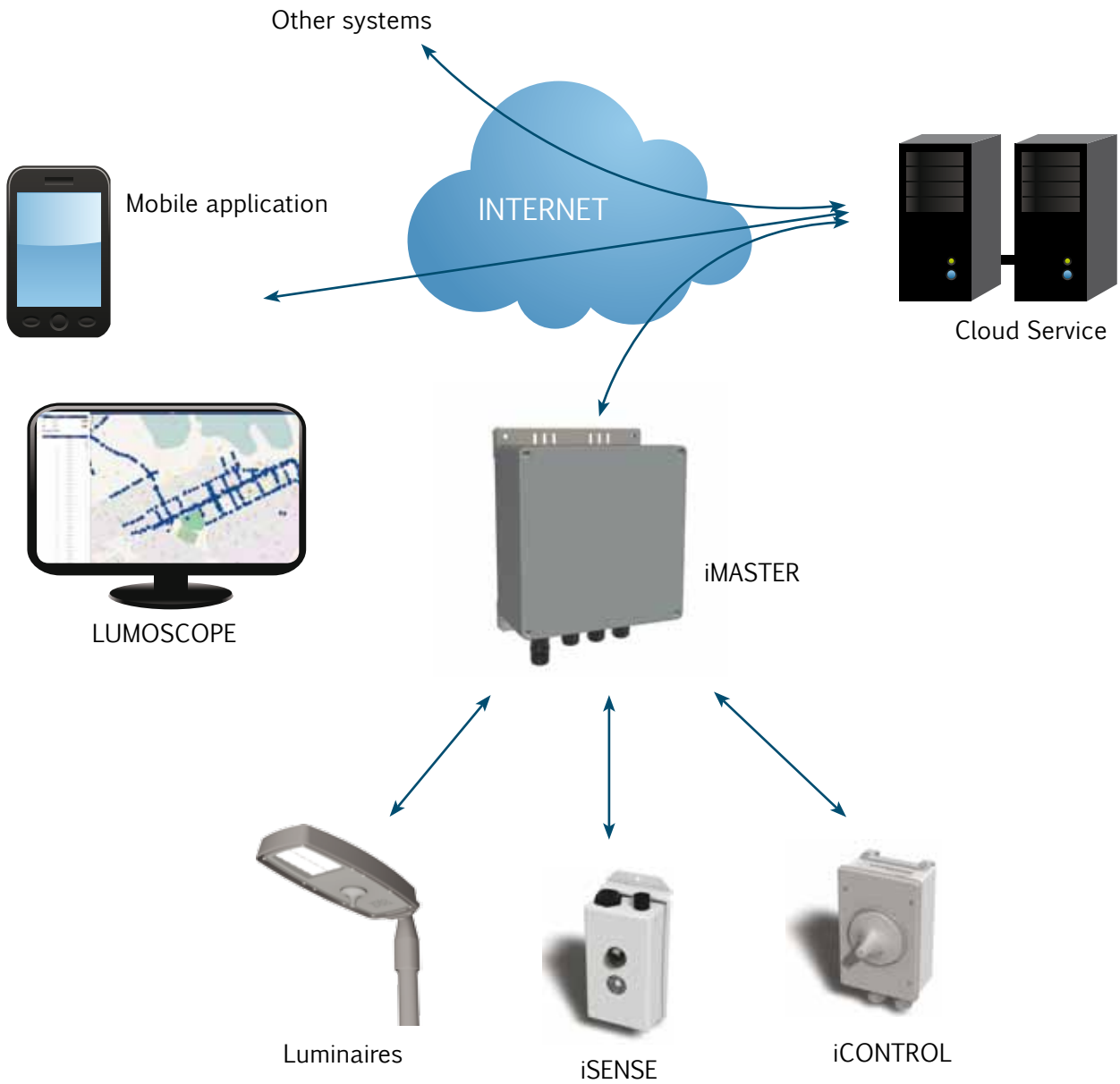
Lighting System is controlled in real-time locally with iMaster and other devices like sensors and control units.

Energy saving and CO2 reduction is achieved not just with LED technology itself but also with intelligent control when area lighting is optimized with sensors and dimming profiles.

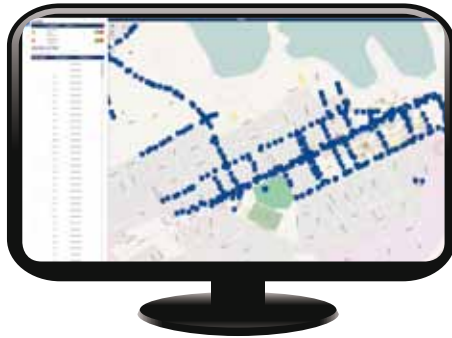
Communication between devices is secured with encryption to protect controls and data.

INTERWORKING WITH OTHER SYSTEMS

Lighting control from other systems and providing information to other systems.



LUMOSCOPE

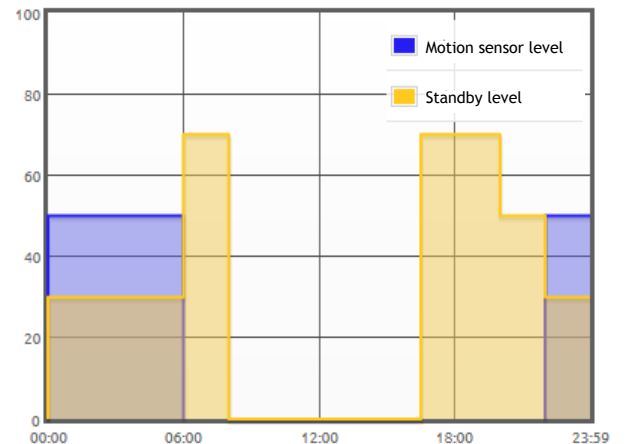


CENTRAL MANAGEMENT

- Cloud Service based management
- Web based management interface
- Luminaire grouping and information easily on map view
- Reports

INTELLIGENT CONTROL

- Energy efficiency with intelligent control
- Advanced lumination control with dimming option
- Timing defined with actual time or sun clock
- Use of sensors to save energy and provide higher level of lighting when needed



FLEXIBILITY IN LIGHTING SOLUTION

- Luminaire grouping to optimize area specific lighting
- Intelligent luminaires can be controlled centrally with profiles and directly by sensors



LIFETIME BENEFITS

- Energy efficiency and CO2 reduction, up to 50% savings in energy consumption with intelligent control (in addition to savings when switched to LED lighting)
- Optimal lighting to areas with dimming and grouping
- Maintenance cost reduction
- Failure reports with location information
- Remote configuration
- New features with remote SW updates
- Burn hour calculation

DEVICES & MODULES



iMASTER

iMASTER is the central communication and controlling hub in the intelligent LED lighting system. iMASTER controls and manages all intelligent nodes in the local area. iMASTER also connects the local area to the cloud service for central management.

iCONTROL

iCONTROL is a multipurpose device to add luminaires, luminaire groups and sensors in to the intelligent lighting system. iCONTROL can control groups of DALI and 1-10V dimmable luminaires or used with on/off power control relays.



iSWITCH

iSWITCH is typically used with area lighting (like parks, sports venues) and indoor installations where manual control of lighting is needed.



iSENSE

iSENSE is an intelligent multi purpose wireless sensor device. iSENSE is programmed to detect motion, ambient light level or temperature depending on the lighting solution.



MODULES FOR LUMINAIRES

iNODE modules make luminaires intelligent. iNODEs provide luminaires wireless network connection and intelligent luminaire control. Modules are available with DALI, 1-10V and PWM control interface.

Sensors are integrated into luminaires with iLUMNET Sensor interface that is available in iNODEs. Sensor cards for most common sensors like motion and luminance detectors are readily available.



iLUMNET ®
c/o Valopaa Oy
Konekuja 2
90620 Oulu, FINLAND

www.ilumnet.com
info@illumnet.com
+358 (0)10 470 8890