

# Central Control and Management Systems for your Road and Street Lighting

# **Qulon Software and Database Functionality**

Remote control, setup, diagnostic, programming, and scheduling of street lighting behavior. Real-time switching of power cabinets, individual luminaires or luminaire groups. Display of remote objects and their status on the integrated map. Power consumption and system performance reports in form of tables and graphs. Immediate identification of lamp failures and threshold exceeding. Scheduled report via email + alarm notifications through text messages. Lamp replacement forecasts and notifications. Full mimic diagrams of your lighting installations. Integration in third-party telemanagement systems. User access level management.



## Reporting Capabilities

Flexible scheduled reporting tools.

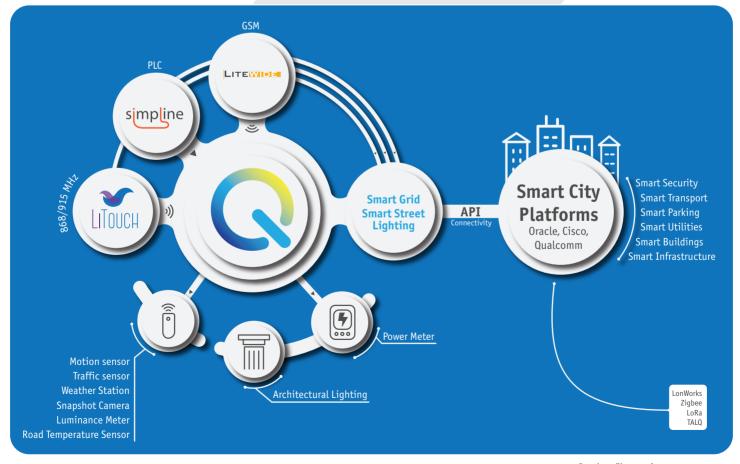
Reports from various additional sensors such as weather and traffic. Analytic tool that shows real-time information about power consumption and financial savings.

















## **Cloud Software**

QULON Software Standard plan is cloud-based software with full lighting management functionality. This software plan is intended to be used for relatively small street lighting projects. Generally applied to clients who do not have their own maintenance services, and no IT in-house services. QULON CMS is programmed by Sundrax, database is hosted by Sundrax. Deployment is quickest and hassle-free. QULON software works in any browser and updated weekly in a background mode. Standard plan is pay-per-light scheme.

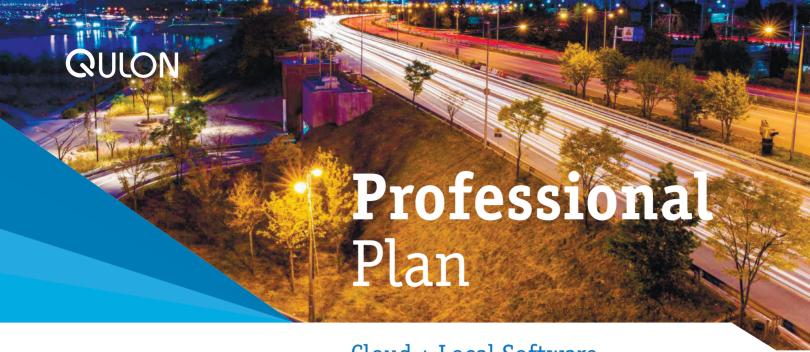
## **System Requirements**

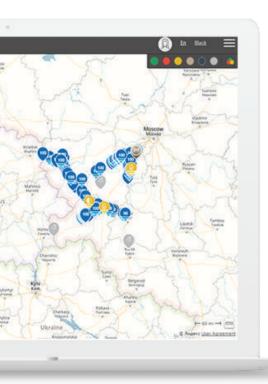
#### **Supported Maps**

Google Maps, OpenStreetMap, Yandex, Microsoft Maps, Uploaded map files

Product code
QUL-CLIENT-STD







Product code QUL-CLIENT-PRO

# Cloud + Local Software

QULON Software Professional plan is cloud-based software with full lighting management functionality plus Windows-based software for administrators, intended to be used for medium-scale projects. Generally applied to clients who have their own maintenance crews and/or help desk service. In addition to all features of Standard plan, clients can program QULON system themselves through Windows-based local software for administrators. Software is updated and backed-up in background mode as the database is hosted on Sundrax servers. Professional plan is fixed monthly or yearly payment.

## **System Requirements**

#### **Supported Maps**

Google Maps, OpenStreetMap, Yandex, Microsoft Maps, Uploaded map files

#### Software Requirements

Operating System: Windows XP®, Vista®, 7, 8, 10

Browsers: Internet Explorer, Mozilla Firefox, Google Chrome,

Opera, Safari

#### Minimal Hardware Requirements

Processor: Intel® Pentium® 4 or equivalent

Memory: 1 GB RAM

Hard Drive: 5 GB of free disk space

#### **Platform Compatibility**

Cloud Software: PC/Mac compatible, iOS/Android/Windows

tablet smartphone compatible

Local Software: Microsoft Windows compatible







Product code
QUL-SERVER-ULT
+ optional QULON server
with pre-installed software
QUL-SERVER-ULT

## Cloud + Local Software + Server

QULON Software Ultimate plan is cloud-based software with full lighting management functionality plus Windows-based software for administrators hosted on a server located at customer's territory. The Software is installed and commissioned on customer's or 3rd party local servers. Alternatively Sundrax supplies server with pre-installed software and database. Support and software updates after commissioning exclusively by Sundrax or verified partners based on Customer Support Agreement. Ultimate pack requires deeper training, more qualified staff and in-house IT services to handle database hosting and system programming.

### **System Requirements**

#### **Supported Maps**

Google Maps, OpenStreetMap, Yandex, Microsoft Maps, Uploaded map files

#### Software Requirements (Server)

Microsoft® IIS 7.0, Microsoft® SQL Server

Microsoft® .NET framework 4.0

Operating System: Windows Server® 2003 or higher

#### Minimal Hardware Requirements (Server)

Processor: Intel® Xeon® E5-2.2GHz or equivalent

Memory: 24 GB RAM

Hard Drive: 5 GB of free disk space

#### Platform Compatibility

Cloud Software: PC/Mac compatible, iOS/Android/Windows

tablet smartphone compatible

Local Software: Microsoft Windows compatible





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# Standard

Relatively small street lighting projects, for clients who do not have their own maintenance services, no IT services are needed as well.

# **Professional**

Medium-scale projects, for clients who render street light maintenance services onsite, or provide help desk services for other maintenance companies.

# **Ultimate**

City-wide projects, for clients who render maintenance services and have their own IT services to handle database hosting and system programming. Recommended for clients whose servers are to be located at client's territory.

#### Cloud

Hassle-free pre-programmed system. Pay per light scheme. Minimum operation costs. Fastest implementation. Works in any browser. Weekly software updates.



#### Cloud + Local

Flexible programming options. Local setup functions are exercised through locally installed Admin Software. Requires staff that are more skilled. Database is hosted by Sundrax. Fixed payment. Weekly software updates.





#### Cloud + Local + Server

Server with pre-installed software and database is supplied. Full independence – entire system is hosted at your premises. Flexible programming options. Local setup functions are exercised through locally installed Admin Software. Deeper training is required. Updates and support based on Customer Support Agreement.











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Live control	Standard	Professional	Ultimate	
Live asset status on the map Real-time switching and dimming Remote diagnostics of network behaviour Live event statistics	•	•	•	
	Chandand	Professional	Illtimate	
Scheduling  Pre-programming of available schedules  Select schedules and scenarios  Advanced scheduling  Create new scenarios for street lighting behaviour  Design new architectural lighting scenarios (via LightCoder software)	Standard • •	Professional  • • • • •	Ultimate  • • • •	
Configuring	Standard	Professional	Ultimate	
Pre-configuring, testing and commissioning by Sundrax Attach files and asset specifications Add new assets and objects Advanced configuring Mimic diagrams of installations Street lighting schematic layout	•			
Reporting	Standard	Professional	Ultimate	
Energy consumption and savings reports Errors and warnings reports Report scheduling Maintenance costs reporting (from 2017)	•	•	•	
Notifications	Standard	Professional	Ultimate	
Text message alerts and notifications Email alerts and notifications	•	•	•	
User management	Standard	Professional	Ultimate	
Unlimited users Add new user roles	•	•	•	
Task management (introducing in 2017)	Standard	Professional	Ultimate	
Allocate assets to maintenance crews  Plan and manage onsite inspections and maintenance works  Automatic task assignment  Task manager application for field workers		•	•	
Integration	Standard	Professional	Ultimate	
Integration into other telemanagement systems and smart city platforms Event-driven lighting control: motion sensors, luminance meter for tunnel lighting Traffic sensor, weather station, road temperature, snapshot camera Architectural lighting control: façade, holiday, decorations, art installations Standalone solar-powered street lights	•			
Software & hosting	Standard	Professional	Ultimate	
SaaS cloud-based for daily management Windows-based admin software Server with pre-installed software hosted at client's location	•	•	•	