

Plovdiv Street Lighting Management

A digital control layer for monitoring, scheduling and operating municipal street lighting cabinets.

USE CASE

266

control points

24/7

remote visibility

~45%

cost savings

Digital

cabinet passport

The challenge

- Limited visibility into the status and operating conditions of street lighting cabinets and lighting infrastructure (cables, luminaires, etc.).
- Field inspections often failed to identify outages, abnormal consumption or electrical deviations. Many of them were inefficient.
- The city needed a reliable and cost-effective solution that could decrease the losses and improve performance.

GridBit SLMS solution

- Remote switching and schedule management from a centralized cloud platform.
- Live measurements from each cabinet: voltage, current, power and energy consumption.
- Automatic alarms, map-based visualization and historical reports for faster diagnostics.

How the system works

1

GridBit devices collect real-time measurements and status signals in each cabinet.

2

Data is transferred securely to the GridBit SLMS platform.

3

Operators monitor, control and analyze the network remotely.

Operational impact

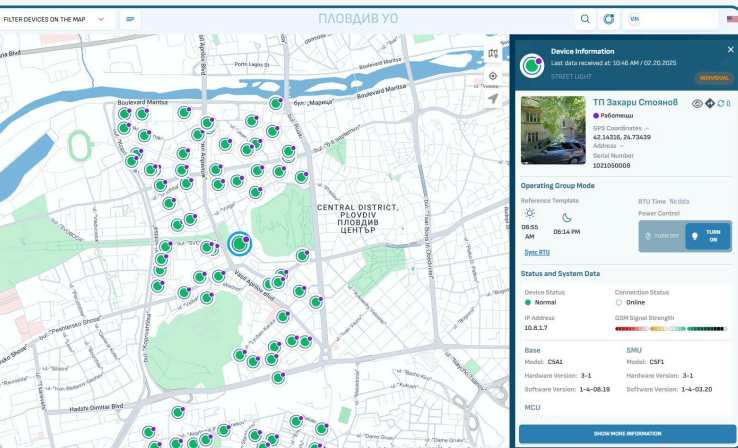
- ✓ Fewer unnecessary site visits
- ✓ Faster fault localization
- ✓ Better control of consumption
- ✓ Foundation for future energy-saving scenarios

The Plovdiv project reflects ADD Bulgaria's commitment to innovation, reliability and responsive support.

ADD Bulgaria
IoT for energy & cities

A closer look at the solution

How GridBit SLMS helps operators monitor, control and optimize municipal street lighting infrastructure.



Field devices inside the cabinet



System architecture



Lighting cabinet

GW / MCU / SMU / RTU modules



Secure communication

Encrypted MQTTS connection



GridBit Platform

Cloud platform, alarms, reports, schedules

What changes for the operator?

Before

- Field visits and manual verification without efficiency.
- Limited visibility into network losses and cabinet-level problems

After GridBit SLMS

- Real-time visibility into every lighting cabinet, luminaire and feeder.
- Proactive maintenance instead of reactive troubleshooting.

“ The Plovdiv project reflects ADD Bulgaria's commitment to innovation, reliability and responsive support.

Lyubomir Karageorgiev - Street Lighting Maintenance Manager