

TELEM-AGC-L for street lighting control



TELEM-AGC-L is used as LCBC (Light Control Box Controller) in smart street lighting solutions. The system is visualized by map based central user interface software.

Features

- Autonomous control of feeder and dimming lines without need of permanent connection to control center based on internal astronomical clock and sensors
 - Dimming via extra wire or via DALI interface
 - GPRS communication via secure VPN channels
 - Integrated radio and gateway functionality for individually controlled luminaires solution
 - Interfaces for energy meters and transducers
 - Astronomical clock
 - NTP time synchronization
 - Alarms via SMS
 - Web browser interface for control and maintenance
- Various data exchange protocols via Ethernet and serial ports
 - Charger for external backup battery
 - Good choice for solutions where older and newer individually controlled luminaires are in same control network

Cyber security

- Firewall functionality supporting IPtables
- Supports VPN connections: OpenVPN, IPsec, L2TP
- Secure remote connection over SSH

Interfaces on base board

- Communication ports
 - GPRS modem
 - Optional radio network interface for luminaire controllers
 - Ethernet RJ45 connector
 - RS-485
 - 1-wire for light and other environmental sensors
- IO connectors
 - 12+7 digital inputs
 - 4 relay outputs (max 0,5 A 250 V AC; 0,25 A 220 V DC)

Expansion module options

- Module H
 - 12 optically isolated 230 V digital inputs
 - 2 relay outputs (max 0,5 A 250 V AC; 0,25 A 220 V DC)
- Module I
 - 12 optically isolated 230 V digital inputs
 - 1 relay output (max 0,5 A 250 V AC; 0,25 A 220 V DC)
 - DALI master interface
- Module J
 - 12 digital inputs for dry contacts
 - 2 relay outputs (max 0,5 A 250 V AC; 0,25 A 220 V DC)
- Module K
 - 12 digital inputs for dry contacts
 - 1 relay output (max 0,5 A 250 V AC; 0,25 A 220 V DC)
 - DALI master interface

Data communication protocols

To upper level systems	OPC UA IEC 60870-5-104
To lower level devices	IEC 60870-5-101 IEC 60870-5-103 IEC 60870-5-104 Modbus-RTU Modbus-TCP IEC 62056-21 (IEC 1107)

Electrical characteristics of isolated inputs

Withstand to static discharge	EN 61000-4-2
Withstand to bursts, surges	EN 61000-4-4, EN 61000-4-5
Immunity to power frequency magnetic field	EN 61000-4-8
Immunity to voltage dips, variations	EN 61000-4-11

Radio frequency compatibility

RF emission	EN 55032
Immunity to RF fields	EN 61000-4-3, EN 61000-4-6

Mechanical and environmental parameters

Degree of protection	IP 30
Dimensions (W x H x D)	65 x 155 x 190 mm (with protruding parts)
Mounting	DIN rail
Ambient temperature in operation	-40...+70°C
Relative humidity	95% non-condensing

Power supply

Supply voltage range	230V AC
Battery connection	12 V battery for backup (optional)
Power consumption (average)	< 5 W

Configuration

The Telem-AGC-L is configured by Telem-GWS software tool. The lighting control rules are changed and added from central user interface.

Parts of configuration can be exported and imported to/from .csv files for using the Excel or similar spreadsheet software.

Order code

AGC-LX-XX-XX

Power	A – 230 V AC
Extra communication	R – Radio; N – No
GPRS modem	4 – 4G; N – No
Expansion module 1	H – 12 DI, 230 V AC, 2 DO; I – 12 DI, 230 V AC, 1 DO, DALI; J – 12 DI, Dry contact, 2 DO; K – 12 DI, Dry contact, 1 DO, DALI; N – No
Expansion module 2	Same options as Expansion module 1 except I&K