



WAGO Lighting Management

The Lighting Control Solution –
Stay in Control of Your System



OUR CONCEPT

The Solution for Efficient Lighting Management in Production Facilities and Warehouses

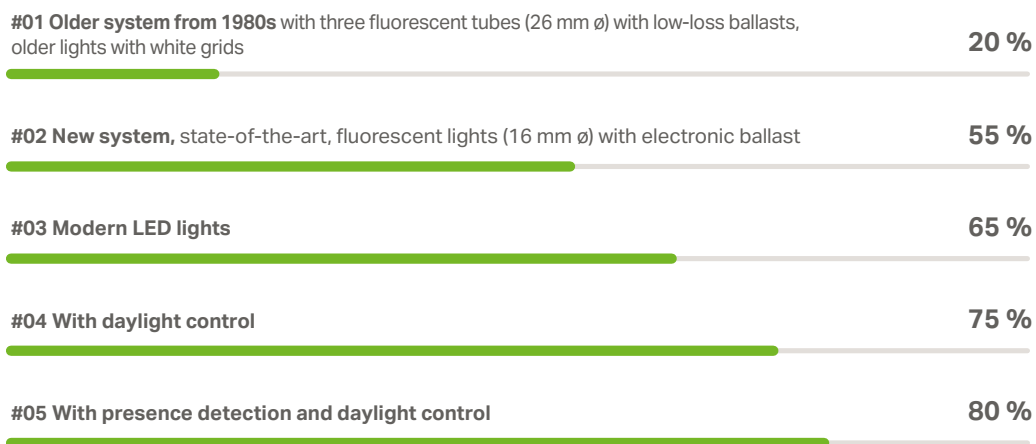
Using a combination of predefined hardware and user-friendly software, WAGO offers a lighting management system that facilitates the design and commissioning of new lighting systems while providing numerous advantages like cost savings for their operation.

WAGO Lighting Management is ready for the vastly different light requirements of warehouses and production facilities. For example, a production facility is divided into virtual rooms in which the light can be flexibly adapted. Each virtual room receives signals from sensors and actuators in order to automatically set the appropriate light intensity. By using the virtual rooms, conversions and room remodeling can be implemented quickly and simply via Web configuration.

Advantages of WAGO Lighting Management:

- Reduce lifecycle costs through efficient lighting management
- Scalable to any system requirement
- Commissioning via easy, wizard-based configuration
- Simple, programming-free conversion
- Connect to higher-level management and control systems within industrial or building technology environments

Potential Energy Savings for Interior Lighting



Savings potential for interior lighting: the baseline reference is an older system from the '70s using standard fluorescent tubes (38 mm \varnothing) with conventional ballasts, older lights with soft-opal reflector (source: licht.de)

Discover more helpful tips like wiring instructions and tutorials here:

www.wago.com/lighting-management

FUNCTIONS

Clever Lighting Management Today



Switching

- Power on/off (with and without watchdog)
- Latching relay
- Staircase function
- Automatic light (motion detector)
- Twilight control



Dimming

- Automatic dimming
- Dimming with presence sensors



Lighting control

- Constant light control
- Human centric lighting (HCL)
- Daylight control:
 - Switching function
 - Staircase function
 - Advanced functions

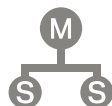


Simple project documentation by mouse click



Time functions

- Weekly
- Vacation
- Special switching programs
- Public holidays



Slave function

- External virtual room
- External dimming value

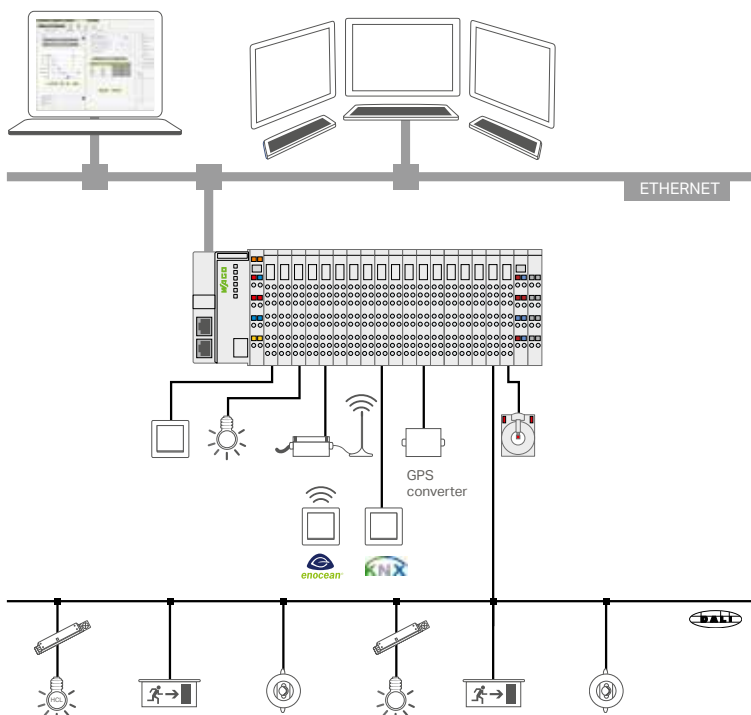


Safety lighting

- Single battery
- Central battery



Accurate energy consumption measurement



WAGO Lighting Management system layout

SCOPE OF FUNCTIONS

DALI, KNX and EnOcean as Standard Features

Software Scope Overview

Maximum Number	Description
16	DALI Multi-Sensors per DALI Multi-Master Module
16	DALI Push-Button Couplers per DALI Multi-Master Module
64	DALI ECG per DALI Multi-Master Module (Notice: Short addresses can not be switched when there are 64 ECGs.)
64	EnOcean Rockers (2-channel)
64	Digital Inputs
32	Digital Outputs
64	MODBUS buttons
16	Clients for cross communication to other WAGO Lighting Management controllers for transfer of input signals
19	Server instances for cross communication to other WAGO Lighting Management controllers for provision of input signals
19	Server instances for cross communication to other WAGO Lighting Management controllers for provision of output signals (function, external dimming value for virtual room)
20	Timer programs
60	KNX switching/dimming/scene objects
60	KNX status objects (1 bit/1 byte)
12	HCL curves

The screenshot displays a software interface for daylight regulation configuration. The interface is divided into several sections:

- Top Navigation:** Includes tabs for 'Function', 'Inputs', 'Outputs', 'Diagnostic', and 'Em. Lighting'. Below these are controls for 'Virtual Room 01', 'Member Virtual Room', 'Central On/Off Switching', and 'Dim Level' (set to 00%).
- Function Panel:** A dropdown menu is set to 'Light Control', with an option for 'Daylight Control with Switch On/Off'.
- Daylight Curve Graph:** A bar chart showing the relationship between various inputs and the resulting output. The y-axis categories are Central On, Central Off, Button Up, Button Down, Single Button, Scene, Watchdog, Override, and Output. The x-axis represents time or sequence.
- General Parameters:** A panel with several adjustable settings:
 - External Daylight Level:
 - Min. Dim Level Daylight Control: 40 %
 - Max. Dim Level Daylight Control: 100 %
 - Dim Level for Off: 0 %
 - Delay Light Total-Off: 15 min
 - Maximum Value:
 - Dim Level Key Switch: 100 %
 - Default HCL-Level: 0 K
- Additional Parameters:**
 - Max. Switch-On Time (Watchdog): 0 min
 - Switch-Off after Override:
- Status Panel:** A list of system status indicators:
 - Actual Dim Level: 64.60%
 - Actual Colour Temperature: 0
 - External Daylight Level:
 - Light Level (Raw Value): 508
 - Watchdog Time (h:mm:ss): 00:00:00
 - Remaining Time Total-Off (h:mm:ss): 00:15:00
 - Priority: No priority
 - Last Event: ID 16#008880D4 Button Up
 - Digital Outputs Maintenance: 0/31
 - DALI ECG Failures: 0/1
 - DALI Lamp Failures: 0/1
 - DALI ECG Not Available: 0/1
 - DALI ECG Receive Errors: 0/1
 - DALI ECG Maintenance: 0/1
 - DALI Multi-Sensors Not Available: 0/1
 - DALI Multi-Sensors Receive Errors: 0/1
 - DALI Button Not Available: 0/0
 - DALI Button Receive Errors: 0/0

Screenshot: daylight regulation configuration interface

ORDER OVERVIEW AND ACCESSORIES

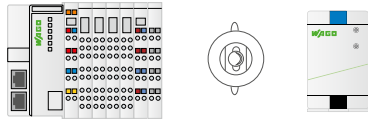
WAGO Lighting Management is compatible with the following components:

	Components	Item No.	Note
Base unit	Lighting Management – Controller	750-8202/000-012	The controllers can communicate with each other.
	Lighting Management – Software	Free of charge	Download: wago.com/applicationcontroller
	DALI Multi-Master	753-647	In addition to 64 DALI actuators (ECGs), a DALI Multi-Master supports up to 16 DALI Multi-Sensors (max. 64 sensor addresses); max. 10 DALI modules per base unit (controller).
	End Module	750-600	An end module must be snapped onto the assembly at the end of a fieldbus node.
	Power Supply to I/O Node	787-1112	24 VDC power supply (2.5 A) to controllers and additional modules
	Power Supply to DALI Multi-Master	787-1007	Power supply to max. 5 DALI Multi-Masters
Extension for inputs/buttons	16-Channel Digital Input; 24 VDC; 3 ms	750-1405	For 1–16 light push-buttons/switch inputs; max. 4 extensions per base package
Extension for outputs/actuators	16-Channel Digital Output; 24 VDC; 0.5 A	750-1504	For 1–16 actuators/lamps/relays/ECG control; max. 2 extensions per base package
	Socket with Relay; 1 make contact; 24 VDC	788-357	Light switching via relay
Extension for EnOcean radio	RS-232/-485 Serial Interface	750-652	Serial interface connects to STC65-RS-485 EVC EnOcean Radio Transmitter/Receiver (for 1–64 rocker switches).
	EnOcean Receiver/Transmitter	2852-7101	Receives EnOcean radio signals and transmits them to the I/O node.
	EnOcean Repeater	2852-7102	Extends the transmission range (for more planning information, visit the EnOcean website).
	EnOcean easyfit PTM 250 Radio Transmitter; 2-channel lighting control	758-940/001-000	1–2 or 1–4 signals; range of 30 meters in buildings to the radio receiver
EnOcean easyfit PTM 250 Radio Transmitter; 4-channel lighting control	758-940/003-000		
Extension for external time request	Real-Time Clock Module	750-640	Time synchronization module, if no time server connection is possible
	GPS DCF Converter	2852-7901	Converter/external receiver for time synchronization
Extension for energy data measurement	3-Phase Power Measurement; 690 VAC	750-495/xxx-xxx	
	Current and voltage connections	2007-8874, 2007-8877	Pre-assembled terminal block assemblies for easy connection and short-circuiting of current transformers (current transformers, see Full Line Catalog Volume 4)
Extension for KNX buttons	KNX Module	753-646	Connects KNX buttons to the I/O node.
Extension for sensors	DALI Multi-Sensor Kit	2851-8201	Brightness measurement and motion sensor: Kit connects to a DALI bus system.
	DALI Sensor Coupler	2851-8202	Sensor coupler for connecting MULTI-3-CI sensors to DALI Max. 16 DALI sensor couplers per DALI Multi Master (753-647)
	DALI HIGHBAY ADAPTER + HIGH BAY	2852-7207, 2852-7201	Brightness measurement and motion sensor for large installation heights (3 ... 13 m)
	DALI HIGHBAY ADAPTER + VISION	2852-7207, 2852-7202	Motion sensor for large areas, open offices, hallways or warehouses
	DALI LS/PD LI	2852-7203	Motion sensor for office lighting (1 ... 5 m)
	DALI Sensor Coupler HF LS LI + Radar Sensor HF LS LI	2852-7205, 2852-7206, 2852-7208	Light and recessed ceiling sensor: combined daylight and motion detection, motion detection via radar
	DALI XC	2852-7301	Push-button coupler connects 4 conventional push-buttons to DALI.
	DALI Sensor Coupler E	2852-7204	Sensor coupler connects standard sensors to DALI.



FIVE EASY STEPS

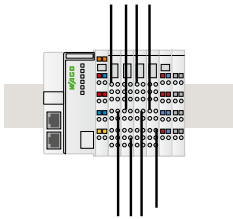
To Installing Your WAGO Lighting Management



1. Select hardware needed



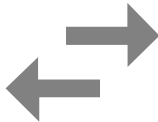
2. Download the "WAGO Lighting Management" Software" from www.wago.com/applicationcontroller and transfer the software to the application controller



3. Install hardware



4. Software-based commissioning



5. Forward values to a higher-level building control system or to a production control center via Modbus TCP/IP