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ALIBUS series intelligent
lighting outdoor illumination
sensor

Installation instruction manual V1.0

Declare

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The company reserves the right to modifications to the product specifications described in this manual without notice. Before ordering, please consult the local agent for the new specifications of this product.

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1. Brief introduction

ALIBUS intelligent lighting outdoor illumination sensor (sensor for short) is the input module of Acrel ALIBUS intelligent lighting control system. This module is connected with other modules (such as smart panel, switch actuator, etc.) together to form a complete intelligent lighting control system for large public construction, buildings, roads and tunnels.

As an input module, the sensor can detect the daylight illumination, and send the real-time illumination value to the actuators in the lighting distribution box (cabinet), so as to realize the automatic control and adjustment of lighting.

2. Product model

ASL220 — L/O

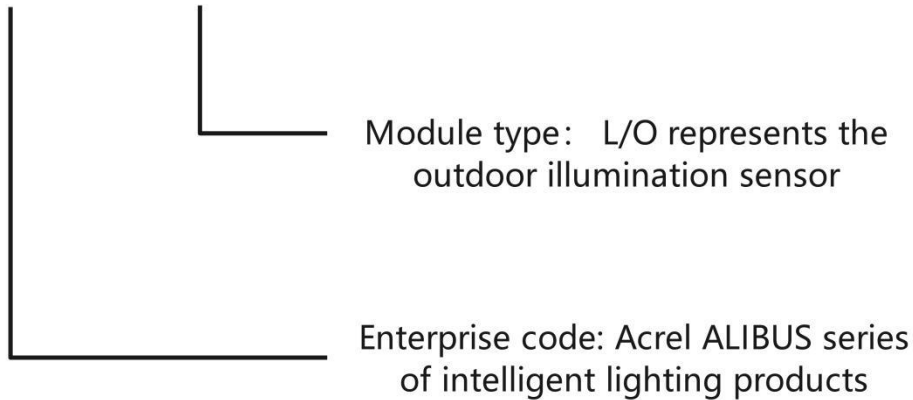


Table 1: Product Specification Table

Product model	Functional description
ASL220-L/O	Detect daylight illumination, send the real-time value and control logic to other modules to realize automatic control

3. Technical parameters

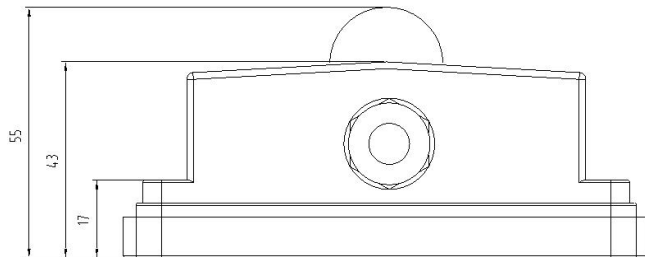
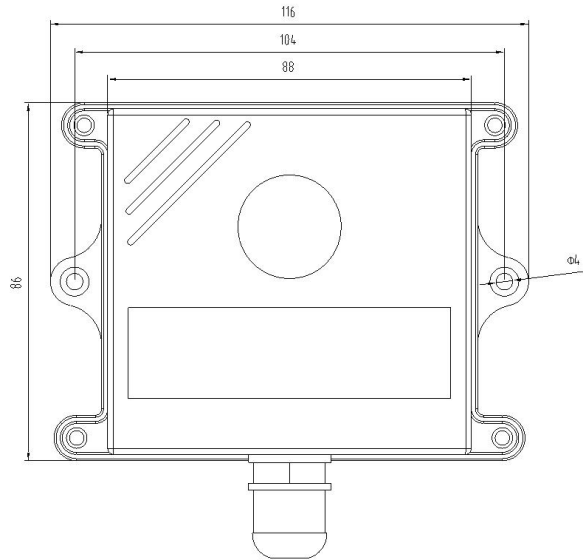
Table 2: Technical parameters table

Item	Index
Power supply	ALIBUS bus power supply: DC24V
Cable	Cat6e shielding network cable (build-in 1.5 m network cable)
Measuring range	0~65528 lx
Shell protection grade	IP65
Communication	ALIBUS

Range of temperature	Operating temperature: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
	Storage temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Environmental requirements	Maximum humidity: 95%
Installation	Wall-mounted installation

4. Installation and wiring

4.1 Appearance and installation dimensions



4.2 Installation

The sensor is wall-mountable by screws. It should be installed in the direct sunlight, and the network cable should be downward.

4.3 The wiring instructions

The connection between the equipment in the system adopts the standard Cat6e shielding network cable connection, without additional working power supply.

5. Operating guide instructions

The network cable of the sensor can be directly connected with the ALIBUS interface of the switch actuator to form a simple system to realize the automatic

control function of time control and illumination control, which is used for the control of street lamp and landscape lighting. It is also possible to access the ALIBUS network to transfer the actual daylight illumination value to other equipment and data center in the system, so as to conform the operation strategy of the lighting control system according to the actual daylight illumination value.

6. Functional

All functions can be set in configuration software. The parameter settings are described as follows:

6.1 Heartbeat

The upload interval of heartbeat message is 5~255s, and 0 means not send.

6.2 Illuminance control

- Set the low threshold: The range is 0~65528.
- Set the high threshold: The range is 0~65528.
- The high threshold must be higher than the low threshold.
- Set the control group address data sending period: The range is 0~255 in minutes. (0 means sent only once when a high or low threshold is exceeded.)
- Control group address: Only one address, the range is 0~65535.
- When the daylight exceeds the upper threshold, the corresponding group address sends a light on command (value 1), and when the daylight level is lower than the lower threshold limit, the corresponding group address sends a light off command (value 0). When the daylight is between high and low thresholds, the original state remains unchanged.

6.3 Illuminance report

- Illuminance reporting cycle: The range is 0~255 in minutes, and 0 means not send.
- The illuminance reporting group address: Only one address, the range is 0~65535.

6.4 Illuminance control enable function

Set the external enable group address of the sensor: Only one address, the range is 0~65535.

7. Troubleshooting

If the daylight detection is abnormal, check whether the sensor is covered and clean and wipe it regularly.

8. Cautions

- Before using the product, please check whether the appearance is in good condition, and contact with the manufacturer in time if it is damaged.

- Connect the wiring correctly according to the instruction manual. Check the wiring carefully to ensure that the wiring is correct.
- This sensor must be installed by a qualified installer and the instructions for use should be carefully read before installation.
- The sensor must be cleaned and wiped regularly.
- The product must be installed and replaced when power-off.
- Must not open the shell to repair the internal components without authorization.

Amendment record

Revised edition	Revision time	Revised terms
V1.0	2023.1.6	The new version was released

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