Analog Light Sensor

Data Sheet

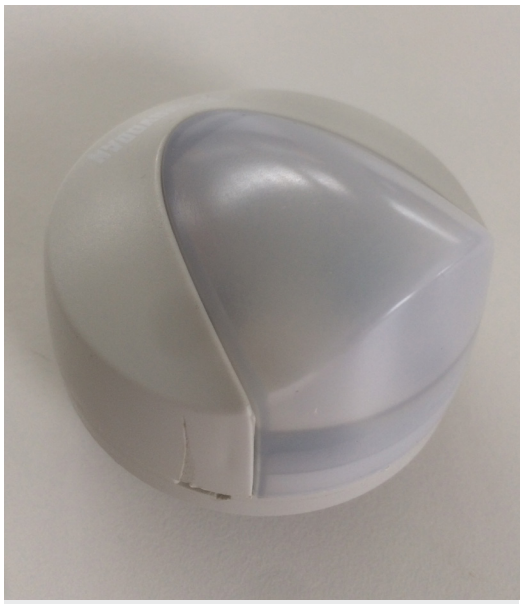
Description

The analog light sensor, when integrated with GridLight™, ensures reliable street lighting activation based on real-time weather conditions. The gridCPU, AmsCPU, and AmsCPU-IO controllers leverage built-in algorithms that combine astronomical calculations with sensor data to optimize lighting schedules, enhancing both safety and energy efficiency throughout the city.

To prevent unintended deactivation, the system supports programmable override logic that disregards sensor inputs during critical nighttime hours — for instance, preventing lights from switching off due to sensor tampering.

Unlike traditional systems that require a light sensor in each cabinet, GridLight™ minimizes the number of sensors needed for city-wide operation. By placing sensors only in areas with distinct weather patterns, such as hilly suburbs, waterfronts, or industrial zones, GridLight™ ensures precise lighting control. Typically, fewer than five strategically placed sensors can effectively manage even large urban areas.

Minimizing sensor deployment reduces maintenance efforts and ensures sensor reliability. Fewer sensors mean less frequent cleaning and lower failure rates, preventing premature activation and unnecessary burn hours. Cities retrofitted by Amplex have seen energy savings of 8–15% by consolidating cabinet-based light sensors into a streamlined, city-wide control strategy.

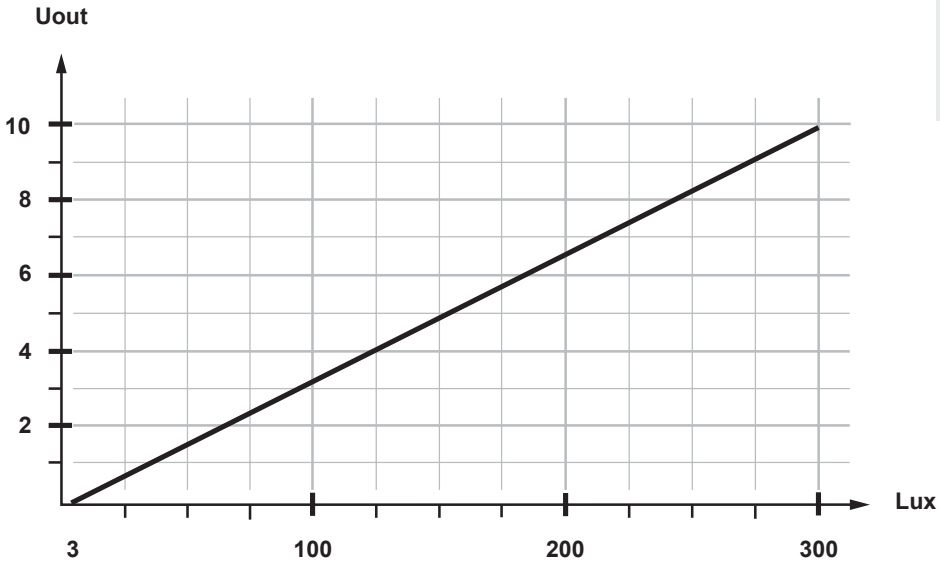


Technical Specifications

Operational specifications

Operating temp.	-40°C to +50°C
IP grade	IP54
Supply voltage	24 VDC
Output voltage	0-10V
Lux ranges	3..300 lux
Connection type	Screw terminals

Graph



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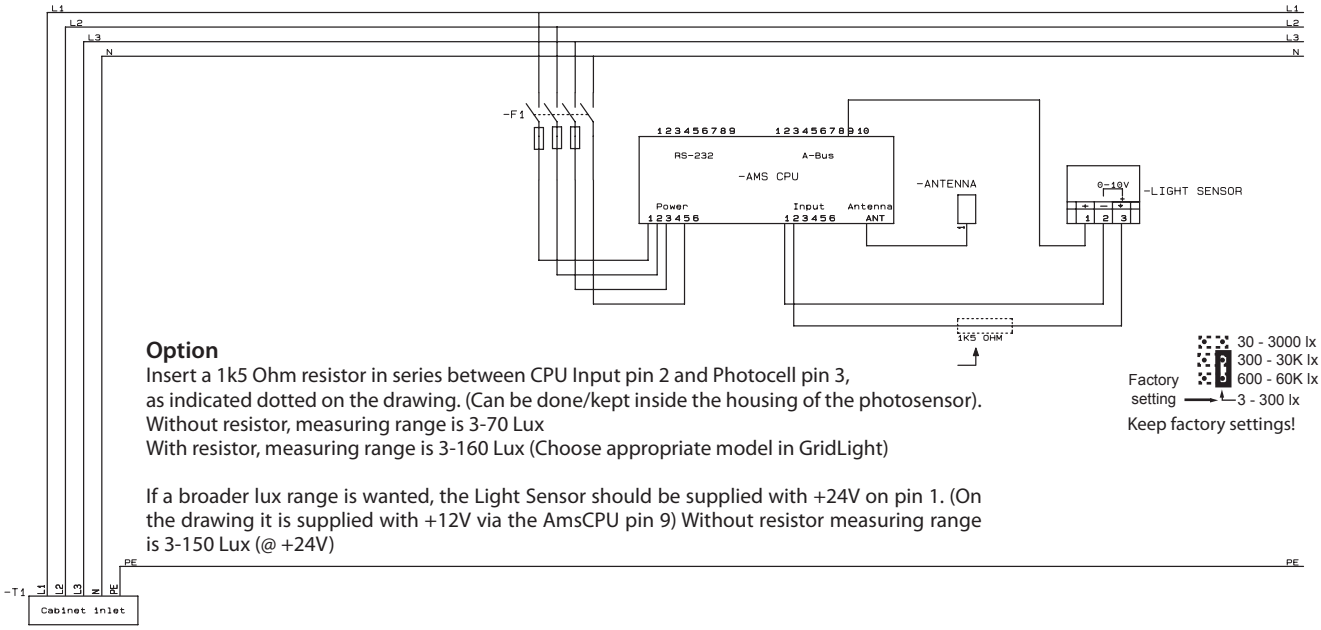
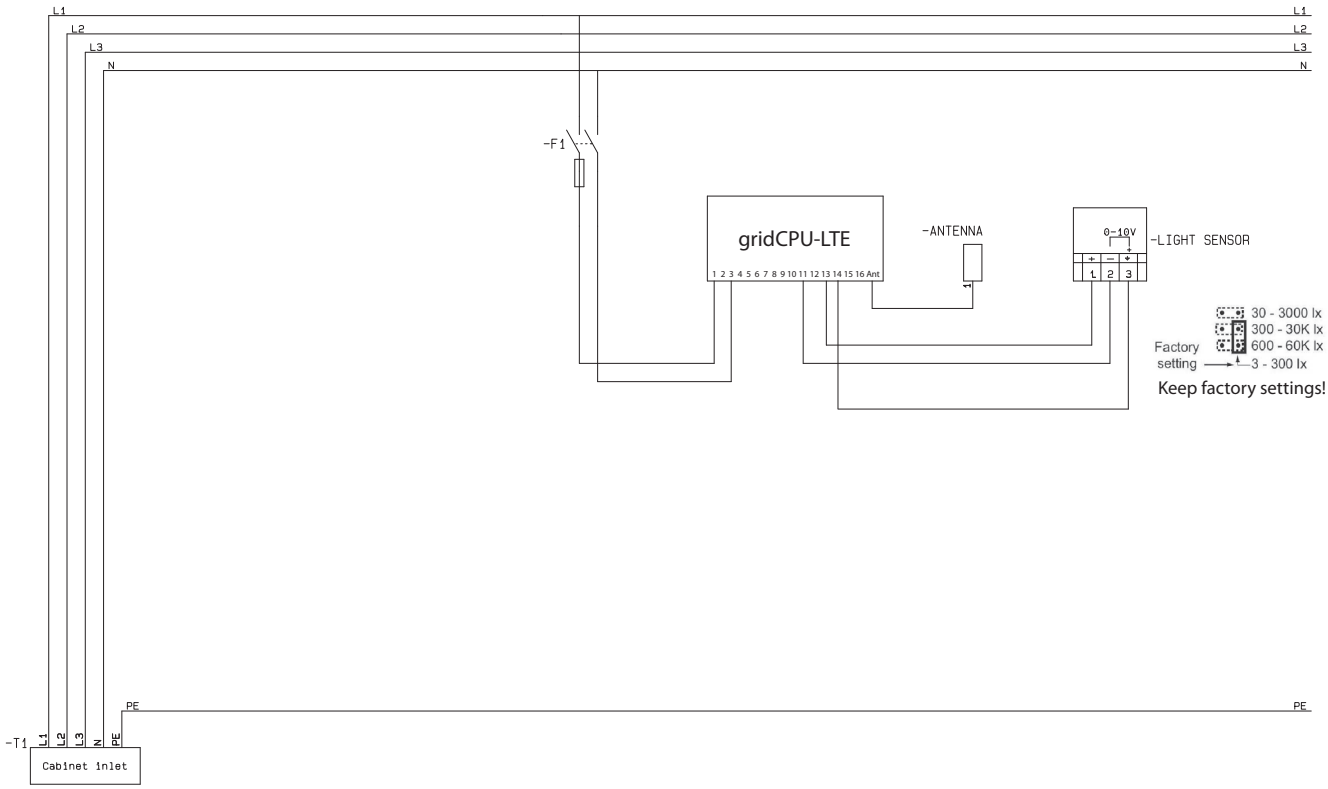
Installation



Option
Insert a 1k5 Ohm resistor in series between CPU Input pin 2 and Photocell pin 3,
as indicated dotted on the drawing. (Can be done/kept inside the housing of the photosensor).
Without resistor, measuring range is 3-70 Lux
With resistor, measuring range is 3-160 Lux (Choose appropriate model in GridLight)

If a broader lux range is wanted, the Light Sensor should be supplied with +24V on pin 1. (On the drawing it is supplied with +12V via the AmsCPU pin 9) Without resistor measuring range is 3-150 Lux (@ +24V)

Keep factory settings!



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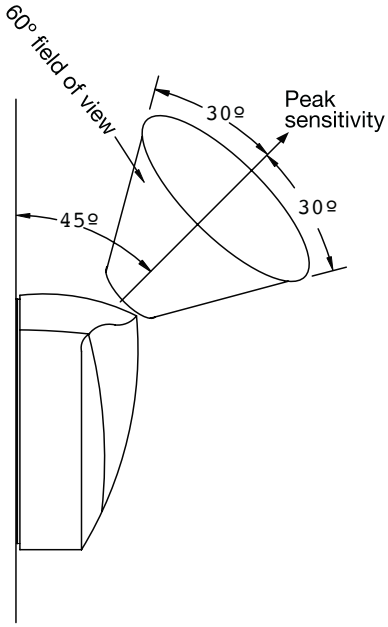

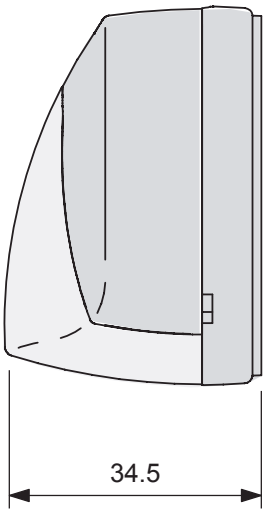

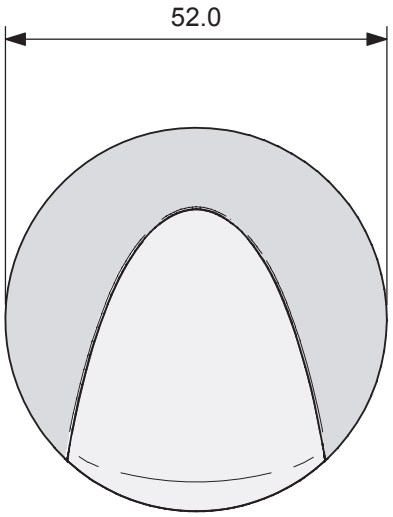

Ordering Information

Product	Order number
Analog Light Sensor	250-40-000
AmsCPU-IO	100-10-002
AmsCPU	100-10-001
gridCPU-LTE	150-10-003
Resistor for analog light sensor	250-30-020

All specifications are subject to changes

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