

Indoor · Outdoor · Atrium · Skylight



**Monitor
Light Levels
Manage
Lighting Costs**

M-Series





Indoor

Indoor applications, mounted 6 to 8 feet from window pointing down.



Outdoor

Outdoor applications, mounted facing northern sky.



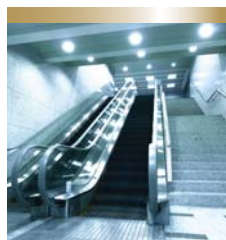
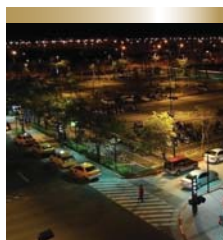
Skylight

Skylight applications, facing upward toward center.



Atrium

Atrium applications, mounted horizontally so that sensor is facing glass.



Sensors that precisely measure ambient light levels in offices, parking lots, warehouses and other applications.

PLCSensors has been providing the industry with ambient light sensors for more than 20 years. These sensors boast the highest level of quality with a wide range of features that make them perfect for precision light monitoring.

MAS Sensors (Remote Adjustment)

The MAS sensors are microprocessor-based light monitors that measure ambient light levels. They provide an analog DC signal to various microprocessors and energy management systems. The sensor is powered by 24VDC and provides a 4-20mA analog signal over 2 wires.

The MAS can be set to a range of 0 to 10,000fc. It comes in many styles of housing, including indoor, outdoor, atrium and skylight. The MAS sensor's signal can be transmitted and programmed for distances up to 4,000ft.

CES Sensors (Internal Adjustment)

The CES sensors measure task or ambient light levels precisely. The light level measured is converted to an analog signal that is sent to a building automation system (EMS) or the lighting controller. Models of the CES can be powered by 5 to 24V and send a 5 or 10V signal over 3 wires.

PD Sensors (External Adjustment)

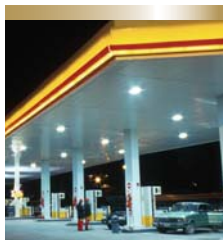
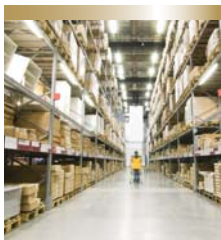
These are a Class 2, low voltage light sensor designed to provide input to PLCBuildings controllers. PD sensor models are available in a wide variety of light sensing ranges and housing styles. This is a 4 wire device with external range adjustment. It allows controllers to switch banks of lights "ON" and "OFF", or provide continuous signals to electronic dimming ballasts for fluorescent fixtures.

Individually Calibrated to Precise NIST Specifications

Every CES and MAS photo sensor is individually calibrated to National Institute of Science and Technology (NIST) traceable standards. Each sensor is adjusted to ensure that its minimum and maximum footcandle settings are precisely matched to its NIST reference. This ensures that the photo sensor meets your needs precisely and any additional photo sensors will operate to the same exact specification.

Sensors Made to Your Specifications

We can also customize these photo sensors to meet your specific needs. We can modify the sensor optics, housing, mounting and wiring to meet your exact specifications.



Specifications

MAS Sensors

Sensor	Style	Min (fc)	Max (fc)	Factory (fc)
MAS/II	Indoor	0	200	100
MAS/O	Outdoor	0	500	250
MAS/A	Atrium	50	2,000	1,000
MAS/S	Skylight	100	10,000	5,000

Input Voltage 24VDC (+6VDC/-6VDC)
Output Current 4.0-20mA (+/- .1mADC)

CES Sensors

Sensor	Style	Min (fc)	Max (fc)	Factory (fc)	Cut Loop Wire
CES/II	Indoor	0	70-750	100	N/A
CES/IL	Indoor-Low	0	40-60	40	20
CES/ILF	Indoor-Low	0	40-65	60	25
CES/ILD2	Indoor-Low	0	50-75	50	25
CES/O	Outdoor	0	50-750	250	N/A
CES/OD	Outdoor-Dark	0	500-7,500	1,000	N/A
CES/A	Atrium	0	200-2,500	1,000	N/A
CES/S	Skylight	0	1,000-7,500	2,000	N/A

Input Voltage 5, 10, 12, 24VDC
Output Voltage 5 or 10VDC (+/- .1VDC) full output
Approvals UL916

PD Sensors

Sensor	Style	Min (fc)	Max (fc)
PD1	Indoor	0	0-750
PD5	Outdoor	0	0-750
PD5D	Outdoor	5	500-2,500
PD9	Atrium	2	200-4,000
PD9D	Skylight	10	1,000-10,000
PD9DT	Tunnel	10	1,000-10,000

Input Voltage 12VDC
Output Voltage 0 at darkness to 9VDC at full output
Approvals UL916

Calibration Devices

M-SIM

Photodiode simulator for sensors. Switch between actual sensor reading and simulator potentiometer.

3X/IPD

For LC3X controllers. Photodiode adapter with 25 turn-range adjustment.

MAS-CAL

MAS Sensor calibration tool adjusts range to be half, equal to or twice the factory default.

Response time can be set to instant, equal to or twice the factory default.



Control Devices

If you have any questions, please call us toll-free at 1-866-998-5483
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