



PROJECT

LOCATION



Indoor Sensor



Skylight Sensor



Outdoor Sensor



Atrium Sensor

MAS

PHOTODIODE SENSOR
WITH 4-20mA OUTPUT
2-Wire, Loop Powered, Microprocessor

DESCRIPTION

The MAS is a two wire, microprocessor photosensor which provides a light level input into lighting control and building automation systems. Four models are available for use in different parts of a building (Indoor, Atrium, Skylight and Outdoor). Custom wire lengths, lens and housing modifications and multi-point NIST calibration services are also available.

BASIC OPERATION

Sensors are typically powered by 24VDC, but can accept 18-30VDC. The robust 4-20mA output signal provides a range of up to 4,000ft. Both 4mA and 20mA output values are calibrated to factory standard footcandle settings using NIST traceable equipment. All MAS sensors are Class 2 wiring devices.

FIELD FC RANGE AND TIME DELAY ADJUSTMENT

The MAS-CAL field calibration device is used to both configure and display the actual milliamp signal of the MAS sensor. Using the MAS-CAL, the sensor range and time response can be adjusted in the field.

APPLICATIONS

- Indoor sensors: interior spaces such as offices and classrooms
- Outdoor sensors: sign and site illumination control
- Atrium sensors: atrium lit spaces such as lobbies
- Skylight sensors: spaces illuminated via sky lights such as warehouses

FEATURES

- Compatible with many lighting and building automation controllers
- Measuring range: 0-10,000fc (model dependent)
- Output: 4-20mA
- Output signal range: up to 4,000ft
- Adjustable response time
- Indoor sensor adhesive ceiling mount, all others 1/2" NPT mount
- NIST traceable calibration available
- 5 year warranty

SPECIFICATIONS

ELECTRICAL

Input Voltage:	18-30 VDC
Output Range:	4-20mA
Photodiode:	Blue Enhanced
Signal Range:	4,000ft.

Adjustment (Using MAS-CAL)

Time Response:	0T-Instant, 1T-10min, 2T-20min
fc Range:	1/2X-Half, 1X-Factory, 2X-Twice
Operating Temp:	-4° to 167°F (-20° to 75°C)

CODE COMPLIANCE

Sensors can be used to meet ASHRAE 90.1, IECC & Title 24 energy code requirements.



CONFIGURATION INFO

PRODUCT	APPLICATION	LENS	MOUNTING	MIN FC	MAX FC*	TIME RESPONSE*
MAS/I	Indoor	Clear Fresnel	Ceiling	0fc	50fc(½ X)/100fc(1X)/200fc(2X)	Instant(0T)/10 min.(1T)/20 min.(2T)
MAS/O	Outdoor	Clear-Flat	½" NPT	0fc	125fc(½ X)/250fc(1X)/500(2X)	Instant(0T)/10 min.(1T)/20 min.(2T)
MAS/A	Atrium	Opaque-Dome	½" NPT	50fc	500fc(½ X)/1,000fc(1X)/2,000fc(2X)	Instant(0T)/10 min.(1T)/20 min.(2T)
MAS/S	Sky Light	Dark-Dome	½" NPT	100fc	2,500fc(½ X)/5,000fc(1X)/10,000fc(2X)	Instant(0T)/10 min.(1T)/20 min.(2T)

*Field Adjustable using MAS-CAL

ORDERING INFO

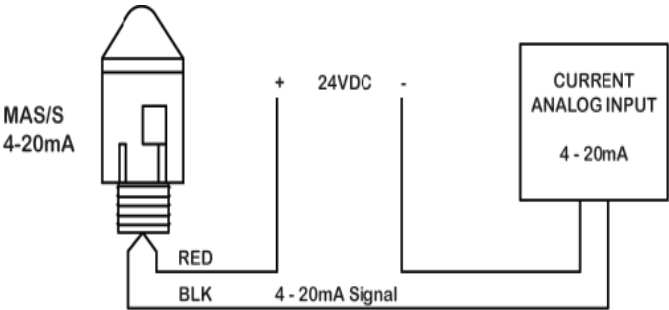
SAMPLE MODEL# MAS/I 1X0T

MODEL	FC RANGE	TIME RESPONSE
MAS/I	½X	0T
MAS/O	1X	1T
MAS/A	2X	2T
MAS/S		

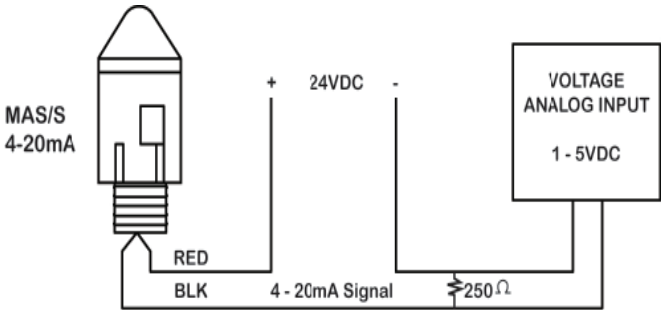
MAS-CAL (no fc range or time response)

needed)

WIRING



CURRENT CONNECTION



VOLTAGE CONNECTION