

# PLC Multipoint

## TMAS

Illuminance Measurement  
Tunnel Lighting Control System



PROJECT

LOCATION

### FEATURES

- Factory Range: 0-5,000Fc
- Powered by 18-30VDC with polarity protection
- 2 wire loop powered 4-20mA signal
- Range adjustable in the field, to either half or twice the factory setting
- Time adjustable for full scale response to 0, and 10 or 20 minutes
- Program changes over 4-20mA signal wires up to 2,000ft away
- Blue-enhanced Photodiode
- Provides linear response, repeatability and minimal temperature effects over the range of the sensor
- Components rated for 0° - 60°C and housed in a thermostatically controlled heated enclosure
- UL508A, CAN/CSA C22.2 14-M91 listing
- 5 year warranty

### DESCRIPTION

PLC Multipoint TMAS sensor provides a linear analog input signal to controllers proportional to the light measured. Sensor is enclosed in a heated weather-proof housing to prevent icing and condensation. Sensor sends a 4-20mA signal to the controller.

#### Illuminance Measurement

TMAS Tunnel illuminance sensors provide analog measurements in foot-candles. TMAS sensors should be mounted to monitor ambient light near each entrance tunnel portal. The TMAS sensor mounting location is selected

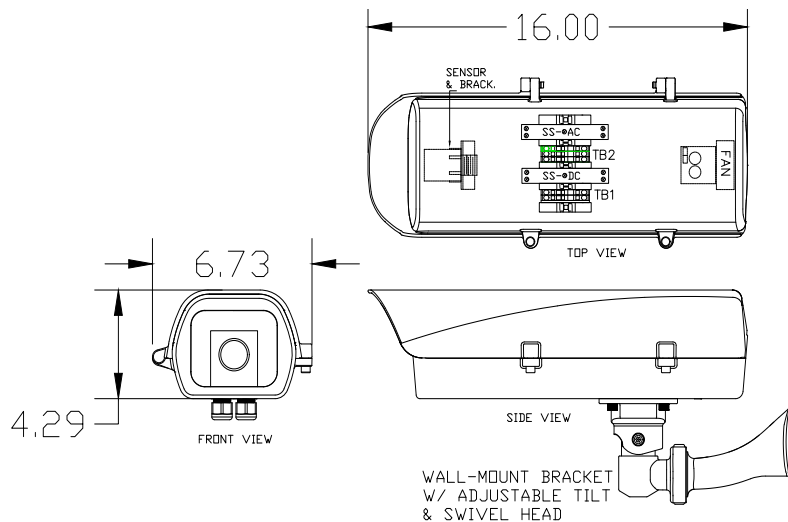
from several factors; unidirectional or bidirectional traffic flow, dominant traffic direction, time of year requiring most contrast lighting and maintainability. PLC Multipoint offers assistance selecting the optimal sensor mounting location.

The TMAS sensor can be mounted using either a wall bracket or an optional pole mount bracket. Power can be provided from either the receiving controller or using an optional multitap transformer TU24 (480/277/208/120 to 24VAC 40VA) at the sensor.

## TECHNICAL DATA

Accuracy:	Repeatability +/- 5% Linearity +/- 2% at 70°F (21 °C) Temperature +/- 10%
Overall Tolerance:	+/- 12% over the specified light and temperature range
Operating Temperature:	-40°F to 140°F (-40°C to 60°C)
Internal Heating Element:	ON at 50°F (10°C) and OFF at 80°F (27°C)
Sensor Type:	Blue-enhanced Photodiode
Distance:	2,000 ft.
Housing:	NEMA4X
Adjustment:	Use PLC Multipoint MAS-CAL
Sensor Ranges:	2,500Fc, 5,000Fc (Factory Calibration), 10,000Fc
Sensor Response Time:	0 sec, 10 min (Factory Calibration), 20 min
Power:	24VAC
Compliance Voltage:	24VDC & 6VAC +/-6VDC
Protection:	Non Polarized Voltage Limited
Sensor Output:	4.0 - 20mA +0.1/-0.1mA
Listing:	UL508A, CAN/CSA C22.2 14-M91
Notes:	Field scalable w/MAS-CAL. See MAS & MAS-CAL Data Sheet for more info.
Options:	Pole Bracket or Wall Bracket TU24 - Multitap 24VAC Transformer PLC Multipoint MAS-CAL Calibration Unit

## DIMENSIONS



## ORDERING INFORMATION

Product	Description
TMAS-W	Illuminance Measurement Tunnel Control System, wall mount, controller
TMAS-P	Illuminance Measurement Tunnel Control System, pole mount, controller
TMAS-W-TU24	Illuminance Measurement Tunnel Control System, wall mount, TU24 Transformer
TMAS-P-TU24	Illuminance Measurement Tunnel Control System, pole mount, TU24 Transformer

