# LG-MW Series LED T8 Motion Sensor Smart Tube 18 Watt Microwave Sensor 4' LED T8 Linear Replacement Lamp Adjustable for "Time Out" and "Brightness Level" - Direct Wire 

## PRODUCT DESCRIPTION:

The Lumentek LG-MW Series is a stand alone LED Replacement tube with an integral Microwave Activity Sensor. Simply by-pass the ballast and it is a direct replacement for $4^{\prime}$ T8 \& T12 fluorescent lamps. The Microwave Activity Sensor is used to detect motion by sending and receiving high frequency radio waves. When a person or vehicle passes the sensor, it detects a rapid change of the signal and automatically signals the tube to turn on or increase the brightness level to $100 \%$. Microwaves penetrate most materials (except metal) therefore they can be used behind a plastic or glass lenses. The Lumentek LED "LG-MW" Smart Tube is an economical way to control your lighting energy costs. In the occupied, full brightness mode it saves $30-40 \%$ over typical T8 fluorescent systems. Unlike fluorescent systems the 50,000 hour rated life of the LED Smart Tube is not affected by frequent switching by the sensor.

## FEATURES:

- High Lumens Per Watt - Up to 100 lumens per watt.
- High Color Rendering - >80 CRI.
- Adjustable End Caps allow aiming of the sensor.
- Long Life 50,000 hours operation.
- Universal 120-277 Volt Direct Wire operation.
- Adjustable for Time Out - from 5 seconds to 60 Minutes
- Adjustable "No Activity" Brightness Levels - 0\% (OFF), 10\%, 20\%, 30\%, 40\%


RoHS
compliant
$\checkmark$ Direct Wire - Bypass ballast and wire Line Voltage to one end and Neutral to the other.
$\checkmark$ Works with Shunted or Un-shunted Sockets.
$\checkmark 120$ Degree Sensor Field of View

## MODEL SELECTION Example LG-T8-1200-18-PW-C-MWS-DW

| LG | T8 | $\mathbf{1 2 0 0}$ | $\mathbf{1 8}$ | PW | C | MWS | DW |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| FAMILY | LAMP <br> TYPE | LENGTH | WATTAG |  |  |  |  |
| E |  |  |  |  |  |  |  |

## LG-MWS Series 18 Watt LED T8 Motion Sensor Smart Tube

## SPECIFICATIONS

| ITEM | SPECIFICATION |  | DETAILS |  |
| :---: | :---: | :---: | :---: | :---: |
| GENERAL PERFORMANCE | Wattage / Lens Type | 18W / CLEAR OR FROSTED | 18W / CLEAR OR FROSTED | 18W / CLEAR OR FROSTED |
|  | Color Temperature (CCT) | $\begin{aligned} & \text { WW = Warm White } \\ & 3000-3500 \text { Kelvin } \end{aligned}$ | $\begin{aligned} P W= & \text { Pure White } \\ & 4000-4500 \text { Kelvin } \end{aligned}$ | $\begin{aligned} & \text { DL = Day Light } \\ & \\ & 5500-6000 \text { Kelvin } \end{aligned}$ |
|  | Lumens Delivered | 1600 | 1750 | 1820 |
|  | Efficacy | 89 LM/W | 97 LM/W | 101 LM/W |
|  | LED Beam Angle | 120 Degrees |  |  |
|  | PIR Sensor Beam Angle | 120 Degrees |  |  |
|  | Brightness Setting (Unoccupied) | 0\% (OFF), 10\%, 20\%, 30\%, 40\% |  |  |
|  | Time (Sensitivity) Setting | 5 Seconds, 30S, 1M, 3M, 5M, 10M, 20M, 30M, 60 Minutes |  |  |
|  | CRI | >80 |  |  |
|  | Lumen Maintenance L70 | 50,000 hours |  |  |
| ELECTRICAL | Power Factor | 90\% |  |  |
|  | Input Voltage | $120 \mathrm{~V}-277 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ |  |  |
| PHYSICAL | Operating Temperature | -4 F to $104 \mathrm{~F} /-20 \mathrm{C}$ to 40 C |  |  |
|  | Base | G13-Medium Bipin |  |  |
|  | Length | 1200 mm - 4' nominal |  |  |
|  | Lens | Polycarbonate |  |  |
| CERTIFICATION | Certification | CE, FCC. RoHS |  |  |
|  | Material Usage | RoHS compliant; no mercury |  |  |
|  | Environment | IP50 |  |  |
|  | Warranty | 3 Years |  |  |

## ORDERING

| DLC MODEL \# | WATT S | LUMENS | CCT | CRI | PF | CLEAR | FROSTED | EFFICACY (L/W) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LG-T8-1200-18-WW-C-MWS-DW | 18 | 1600 | 3000-3500 | 80 | . 90 | x |  | 89 |
| LG-T8-1200-18-PW-C-MWS-DW | 18 | 1750 | 4000-4500 | 80 | . 90 | x |  | 95 |
| LG-T8-1200-18-DL-C-MWS-DW | 18 | 1820 | 5500-6000 | 80 | . 90 | x |  | 100 |
| LG-T8-1200-18-WW-F-MWS-DW | 18 | 1600 | 3000-3500 | 80 | . 90 |  | x | 89 |
| LG-T8-1200-18-PW-F-MWS-DW | 18 | 1750 | 4000-4500 | 80 | . 90 |  | x | 95 |
| LG-T8-1200-18-DL-F-MWS-DW | 18 | 1820 | 5500-6000 | 80 | . 90 |  | x | 100 |

## LG-MW Series 18 Watt LED T8

## SPECIFICATIONS



Microwave Sensor (4):
Maximum Sensing
range: 5-7 Meters


Time setting (1): When there is no activity, the tube light will stay after previous activity to the set time $(5 \mathrm{~S}, 30 \mathrm{~S}, 1 \mathrm{M}, 3 \mathrm{M}$, $5 \mathrm{M}, 10 \mathrm{M}, 20 \mathrm{M}, 30 \mathrm{M}, 60 \mathrm{M}$ )

Brightness setting (2): When there is no activity, the tube light will dim to the set brightness (0, 10\%, 20\%, 30\%, 40\%)


The End Cap (3): is rotatable $90^{\circ}$ clockwise and counterclockwise to accurately position tube for the direction of sensing and illumination


## Sensor Range

Sensor Angle: $180^{*} 360^{\circ}$

## SPECIFICATIONS



Dimensions in mm

## Photometric Data



## WIRING DIAGRAMS

Installation Instruction:


