

# LED Eco-Commercial Strip



|              |                         |                              |                    |
|--------------|-------------------------|------------------------------|--------------------|
| <b>DL-EC</b> | <b>Segment</b>          | <b>Wattage Range</b>         | <b>Lumen Range</b> |
|              | Commercial & Industrial | 18-90W<br>Selectable Wattage | 2,340-12,150lm     |

## Features

- White post painted steel housing in 4ft or 8ft lengths
- Operating temperature range of -20 °C ~ +50 °C.
- Field Selectable CCT (3500K, 4000K & 5000K) along with Auto Sensing 120-347V Driver.
- PMMA opal lens and optional field installed wire guard for additional protection.
- Suitable for Surface, or suspended chain mounting. J-BOX split cover plate (included) and row mounting possible with optional joiner plate.
- Compatible with 0-10V Dimming

## Specifications

### Housing:

White post painted steel housing with split octagon box cover.

### Optics:

PMMA opal lens snaps onto housing.

### Mounting:

Suitable for surface or suspended mounting with standard snap on mounting brackets. Row mounting possible with optional row mount joiner plate.

### Driver:

Autosensing 120-347V, selectable wattage with Operating temperature range of -20 °C ~ +50 °C.

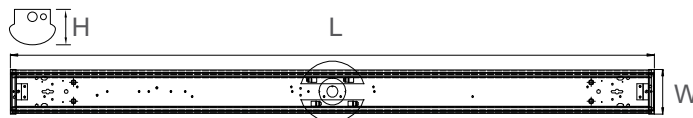
### LED:

Field Selectable CCT of 3500K, 4000K & 5000K. Efficacy of 130lm/w with Lumiled LED

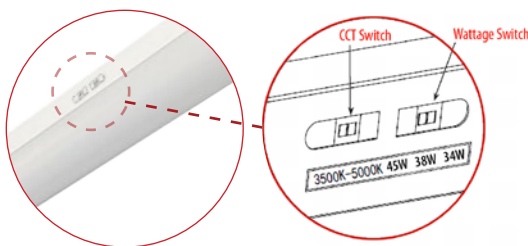
### Controls:

Compatible with optional microwave sensor controlled via optional Remote Control.

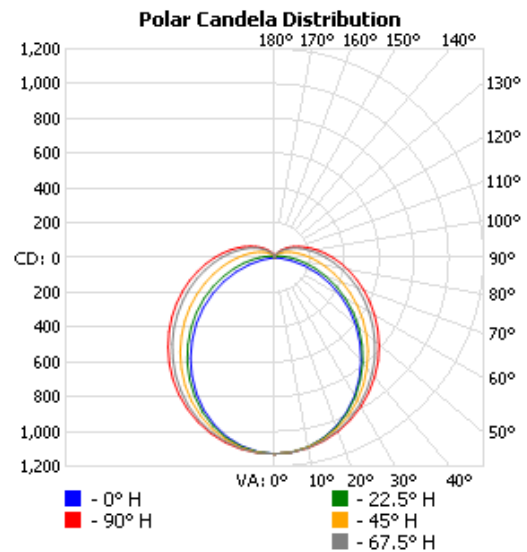
## Dimensional Drawing



|     | L     | W    | H    |
|-----|-------|------|------|
| 4FT | 47.3" | 3.3" | 3.6" |
| 8FT | 94.2" | 3.3" | 3.6" |



## Polar Candela



## Applications



Corridors



Utility rooms



Warehousing

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|              |                         |                              |                    |
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## Ordering Information Example: DL-EC/4F/56W/MK/120-347V/D

| Family Name   | Fixture Type        | Size  | Wattage                        | CCT                 | Voltage  | Dimmable     | Sensor                    | Accessories   |
|---------------|---------------------|---|--------------------------------|---------------------|----------|--------------|---------------------------|---|
| DL (Deltalum) | EC (Eco-Commercial) | 4F (4')<br>4FS (4' Small wattage)<br>4FL (4' Large wattage)<br>8FL (8' Large wattage) | 56W<br>MW (Selectable wattage) | MK (Selectable CCT) | 120-347V | D (Dimmable) | Blank (no sensor)<br>LV6S | RM (Row MTG plate)<br>DL-EC/4F/WG<br>DL-EC/MTG/H-C/KIT<br>DL-EC/LV6S/CONTROLLER |

## Product Specification

| Ordering Code | DLC | Model Number                    | Wattage (W)   | Input Voltage (V) | Hour Rating (L70) | Beam Angle | Initial Delivered Lumens (lumen) | CCT (K)  | CRI | Damp Location | M.O.L (inch) | Case QTY. |
|---------------|-----|---------------------------------|---|-------------------|-------------------|------------|----------------------------------|----------|-----|---------------|--------------|-----------|
| 3666309       | Yes | DL-EC/4F/56W/MK/120-347V/D      | 56  | 120-347V          | 100,000           | 120°       | 7448                             | 35-40-50 | >80 | Yes           | 48           | 6         |
| 3664306       | Yes | DL-EC/4FS/MW/MK/120-347V/D      | 30-25-18  | 120-347V          | 100,000           | 120°       | 4050-3250-2340                   | 35-40-50 | >80 | Yes           | 48           | 6         |
| 3664307       | Yes | DL-EC/4FL/MW/MK/120-347V/D      | 45-38-34  | 120-347V          | 100,000           | 120°       | 6075-4940-4420                   | 35-40-50 | >80 | Yes           | 48           | 6         |
| 3664308       | Yes | DL-EC/8FL/MW/MK/120-347V/D      | 90-75-65  | 120-347V          | 100,000           | 120°       | 12150-9750-8450                  | 35-40-50 | >80 | Yes           | 96           | 4         |
| 3686300       | Yes | DL-EC/4F/56W/MK/120-347V/D/LV6S | 56  | 120-347V          | 100,000           | 120°       | 7448                             | 35-40-50 | >80 | Yes           | 48           | 6         |
| 3680311       | Yes | DL-EC/4FS/MW/MK/120-347V/D/LV6S | 30-25-18  | 120-347V          | 100,000           | 120°       | 3900-3250-2340                   | 35-40-50 | >80 | Yes           | 48           | 6         |
| 3680312       | Yes | DL-EC/4FL/MW/MK/120-347V/D/LV6S | 45-38-34  | 120-347V          | 100,000           | 120°       | 6075-4940-4420                   | 35-40-50 | >80 | Yes           | 48           | 6         |
| 3680313       | Yes | DL-EC/8FL/MW/MK/120-347V/D/LV6S | 90-75-65  | 120-347V          | 100,000           | 120°       | 12150-9750-8450                  | 35-40-50 | >80 | Yes           | 96           | 4         |
| 3660057       | -   | DL-EC/4F/LENS                   | 4ft, replacement white PMMA lens                    |                   |                   |            |                                  |          |     |               |              |           |
| 3660058       | -   | DL-EC/8F/LENS                   | 8ft, replacement white PMMA lens                    |                   |                   |            |                                  |          |     |               |              |           |
| 3660092       | -   | DL-EC/4F/WG                     | 4ft, wire guard                                     |                   |                   |            |                                  |          |     |               |              |           |
| 3660096       | -   | DL-EC/RM                        | Row mounting plate                                  |                   |                   |            |                                  |          |     |               |              |           |
| 3660190       | -   | DL-EC/MTG/H-C/KIT               | 2x V hooks and 2x 1.05m lengths of link chain       |                   |                   |            |                                  |          |     |               |              |           |
| 3768101       | -   | TL-2052                         | PIR motion sensor (sold separately)                 |                   |                   |            |                                  |          |     |               |              |           |
| 3660196       | -   | DL-EC/LV6S/CONTROLLER           | Remote Handheld Controller, for LV6S LOVO 6M SENSOR |                   |                   |            |                                  |          |     |               |              |           |

## Accessories

DL-EC/LENS



DL-EC/WG



DL-EC/RM



DL-EC/LV6S/CONTROLLER



TL-2052



DL-EC/MTG-HC-KIT



## Related Products



SSL-CPG



VIV-T8DF4/11.5W/XX/F



VIV-T8BPSP4/11.5W/XX/F/120-347V



TL-RMES111-UDC

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|--------------|-------------------------|------------------------------|--------------------|
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|              | Commercial & Industrial | 18-90W<br>Selectable Wattage | 2,340-12,150lm     |

## Haisen sensor (Low voltage sensor)

Note: Haisen sensor factory installed



|                               |   |
|-------------------------------|---|
| <b>Operating voltage</b>      | 10.5-15V DC (supply current >50mA, operating current <30mA) |
| <b>Output</b>                 | DIM/1-10V   |
| <b>Stand-by Power</b>         | <0.5W   |
| <b>Detection area</b>         | 100%/75%/50%/25%  |
| <b>Hold-time</b>              | 5s/30s/1min/3 min/5min/10min/20min/30min                    |
| <b>Daylight threshold</b>     | 2lux/10lux/30lux/50lux/80lux/120lux/Disable                 |
| <b>Stand-by period</b>        | 0s/10s/30s/min/5min/10min/30min/+∞                          |
| <b>Stand-by dimming level</b> | 10%/20%/30%/50%   |
| <b>Mounting height</b>        | Max.6m (ceiling mounted)                                    |
| <b>Detection range</b>        | Radius:2-5m(ceiling mounted)                                |
| <b>Detection angle</b>        | 360°(ceiling mounted); <150° (Wall Mounted)                 |
| <b>Operating temperature</b>  | -40°C~+80°C   |
| <b>Warranty</b>               | 5 years   |

Note: Different applications and places will make different detection distance, our result is just for your information. Motion sensor setting and dimming setting please refer to remote control HD05R Lo/Vo controller Haisen.

## DL-EC/LV6S/CONTROLLER

**ON/OFF**  
1. "ON/OFF" key only functions as a switch of the light.  
2. If press this button to turn off the lamp before it's short-circuited, the lamp will remain off after power-on again.

**Auto Mode**  
Press "Auto Mode" button, the sensor starts to work and all settings remain the same before the light gets switched on/off.

**Reset**  
1. Press "Reset" button, change brightness to max level.  
2. Press "Reset" button, products with DIP switch will be controlled by DIP switches; otherwise all the setting will be just initial, that is 100% detection range, hold time 5S, no stand-by time and daylight threshold disabled.  
Flick after press any button  
Flick only after press "Apply" button

**+/-**  
1. To adjust brightness 10-100% in on/off mode.  
2. To adjust highest brightness 60-100% in sensor mode.

**Start**  
Press "Start" to customize scene, users can change detection range, daylight threshold, holdtime, standby dimming level and standby period.

**Memory**  
1. Press "Memory" to save all the settings.  
2. The settings remained as the last time if not get reseted value.

**Apply**  
1. Press "Apply" to deliver the saved setting.  
2. Press "Apply" without "memory" will make all the setting one-time operation.  
3. Settings should be done within 30S, otherwise it exits memory mode.

**Detection area** (Press to define detection area 100%/75%/50%/25%.)

**Hold time** (Press to define holdtime 5s/30s/1min/3min/5min/10min/20min/30min.)

**Stand-by dimming level** (Press to define stand-by dimming level 10%/20%/30%/50%.)

**Stand-by period** (Press to define stand-by period 0s/10s/30s/1min/5min/10min/30min/+∞.)  
Note: "0s" means no standby period; "+∞" means unlimited standby period.

**Daylight threshold** (Press to define daylight level 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable.)  
Note: Disable means light will be turned on once sensor detects movement, regardless of the ambient lux.

**Test (2s)**  
The button "Test (2s)" is for testing purpose after commissioning. Pressing this button, the sensor goes to test mode (hold time is only 2s)

### Memory & Apply Mode

1. Press "ON/OFF button" to turn on the light or off.
  2. To reset the parameters, Please follow the steps as below:  
Step 1 - Press ON, to turn on the light if it was off at the start.  
Step 2 - Press "Start" to the well-setting sensor.  
Step 3 - Press the button of Detection range, Hold time, Stand-by dimming level, Stand-by period and Daylight threshold one after the other in sequence.  
Step 5 - Press "Memory" to memorize the settings.
- Note: The interval of each parameter setting shall be controlled within 30s.**
3. To programme other lights in the array that have similar sensors to the same programme.  
Step 1 - Press "ON" to the second sensor  
Step 2 - Press "Apply"

### Isolated Setting Mode

1. Press "ON/OFF button" to turn on the light or off. Press "Auto Mode", the remote will activate settings that were saved last or remain at the factory default settings.
2. To reset the parameters, Please follow the steps as below:  
Step 1 - Press ON, to turn on the light if it was off at the start.  
Step 2 - Press any button of "Auto Mode", "Reset", "Test" and "Apply" to begin the sensor detection mode.  
Step 3 - Press the button of Detection range, Hold time, Stand-by dimming level, Stand-by period and Daylight threshold one after the other in sequence.

### Note:

1. Settings will be saved automatically and remain until you press reset again.
2. Light will flicker when setting each parameter.

### DL-EC/LV6S Sensor Preset Sensor Settings

|                               |         |
|-------------------------------|---------|
| <b>Detection area</b>         | 100%    |
| <b>Hold-time</b>              | 5s      |
| <b>Daylight threshold</b>     | Disable |
| <b>Stand-by period</b>        | 30min   |
| <b>Stand-by dimming level</b> | 50%     |

### NOTE:

- Microwave can penetrate walls or glass thinner than 20cm, movement in adjacent corridors may be detected.
- Detection area will be affected by speed of motion, mounting height and movement volume.
- Installation shall not be mounted to avoid false trigger caused by the luminaire itself shaking. (Rooftop HVAC, upper floor vibration, etc.)
- Shall not be installed next to large operating machines such as ventilator/ceiling fan to avoid false triggering caused by machine vibration.
- They cannot penetrate metal. Large metal object near the sensor may create a "dead zone" behind it.
- Microwave sensors have advantage over PIR device in that they can operate in hot environments, however, they are sensitive devices and can be prone to false detection by everyday items like ceiling fans, moving branches or curtains, loose packaging, etc.

Other options may be available, consult Turolight Sales. Specifications and data are subject to change without notice.