

# DEFENDER-55 GEN2

## ALL IN ONE SOLAR LIGHT



**ALL-IN-ONE**  
standalone design



**55W**  
10,285lm



# DEFENDER

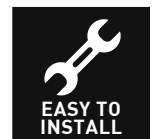
ALL IN ONE SOLAR SERIES

The game changing DEFENDER-55 all one solar light is the most advanced medium duty solar light available from Green Frog Systems. The unit features adjustable angle LED's, twin PIR motion detection and an advanced nano-particle battery with passive cell balancing technology plus a fully programmable solar controller.

Smart City Ready, the DEFENDER can be easily deployed as part of a remotely controlled lighting network independent of the mains power grid without having to compromise on performance.

### APPLICATIONS

- Streets
- Pathways
- Parking Lots
- Industrial
- Marinas
- Jetties
- Parks
- Recreation



# DEFENDER-55 ALL IN ONE SOLAR LIGHT



## SPECIFICATIONS

**MODEL** GFS-DEFENDER-55

### OPERATING PROFILE

Standard operating mode is - **Configurable** - Unit has programmable parameters ranging from 374lm to 10,285lm **NOTE:** Various program and TIMER settings for ON / OFF / DIM are available upon request.

### LED

|                          |  |
|--------------------------|--|
| Type                     | Cree XP-G3 / 12PCS   |
| Watts (Light Output)     | 55W (Max)  |
| Lumen                    | 10,285lm   |
| Rotatable LED Angle      | -40° - +40°  |
| Lens Type                | LEDIL T2 (Default) T3 / T5 (Optional)                        |
| CCT (Colour Temperature) | 4000K (Standard) / 3000K (Optional)                          |
| PIR Sensor Type          | TWIN (2x) Panasonic PIR Sensors (L+R Mount)                  |
| PIR Detection Range      | <15m / <49' detection zone - PIR Boost activates for 30 sec. |
| PIR Boost Power          | Standard (Fixed) -19W (3553lm) / Optional 6W (1122lm)        |

### BATTERY

|                  |  |
|------------------|--|
| Autonomy         | 102 hours (up to 8.5 nights)*                              |
| Battery Capacity | 12.8v / 24Ah / 307.2Wh                                     |
| Battery Type     | LiFePO <sub>4</sub> with passive cell balancing technology |

### SOLAR PANEL

|                       |   |
|-----------------------|---|
| Watts (p) / Type      | 32W Monocrystalline                       |
| Efficiency            | 21%                                       |
| Solar Input Port (DC) | Expansion port for additional solar panel |

### CHARGING PORT (DC)

|                          |  |
|--------------------------|--|
| DC Charging Port (Input) | 15VDC, 3A max  |
| DC Power Output          | 11-15VDC, 3A max *Output voltage varies depending on Battery SOC |

### UNIT

|                           |   |
|---------------------------|---|
| Material                  | 6063-T5 Aluminium Alloy (Black)   |
| Pole Mount Spigot Adaptor | ID - 64mm / 2-3/8" Tennon   |
| Mounting Angle            | Adjustable -90° - +90°  |
| Sail Area / EPA           | 0.06m <sup>2</sup> - 0.27m <sup>2</sup> / 0.64ft <sup>2</sup> - 2.97ft <sup>2</sup> |
| Product Dimensions        | 711L x 386W x 67H mm / 27.99"L x 15.19"W x 2.63"H                                   |
| Product Weight            | 14 kg / 30.86 lb  |
| Package Dimensions        | 925 x 475 x 170 mm / 36.4"L x 18.70"W x 6.69"H                                      |
| Package Weight            | <17kg / 15.43 lb  |

### ENVIRONMENTAL

|                       |                         |
|-----------------------|-------------------------|
| Operating Temp. Range | -20°C-60°C / -4°F-140°F |
| IP Rating             | IP-65                   |

### WARRANTY

|                 |                             |
|-----------------|-----------------------------|
| Warranty Period | 5 years warranty (complete) |
|-----------------|-----------------------------|

### OPTIONS

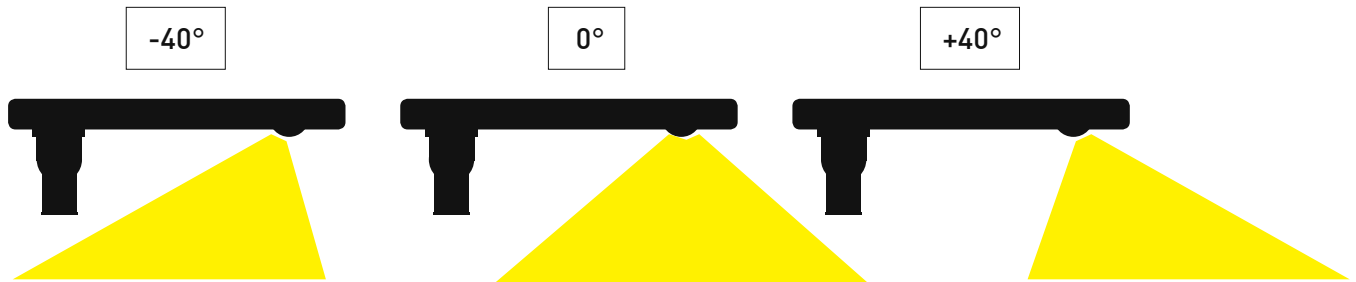
|                                |  |
|--------------------------------|--|
| IOT SAM Enabling               | Smart City Connection / Antenna Kit  |
| Additional 32W solar panel     | Connectible via DC Charging port   |
| Direct Bury HD Galvanised Pole | 6m / 20ft total height - 2 sections, powder coated black 60mm / 2-3/8" spigot                  |
| Hinge Pole                     | 6m / 20ft total height - 2 sections, powder coated black 60mm / 2-3/8" spigot - Hinged at Base |
| Spigot adaptor                 | 76mm / 3" OD   |
| 3000K CCT Conversion           | Custom modification available - Please Enquire   |

\*Based on real world field test data

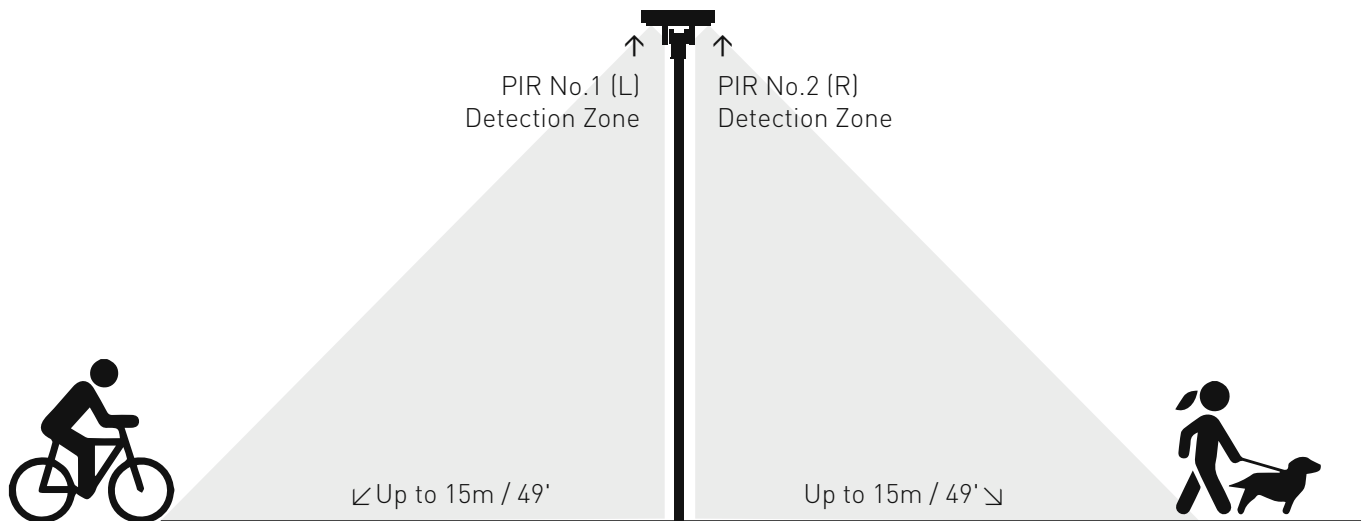
# DEFENDER-55 ALL IN ONE SOLAR LIGHT



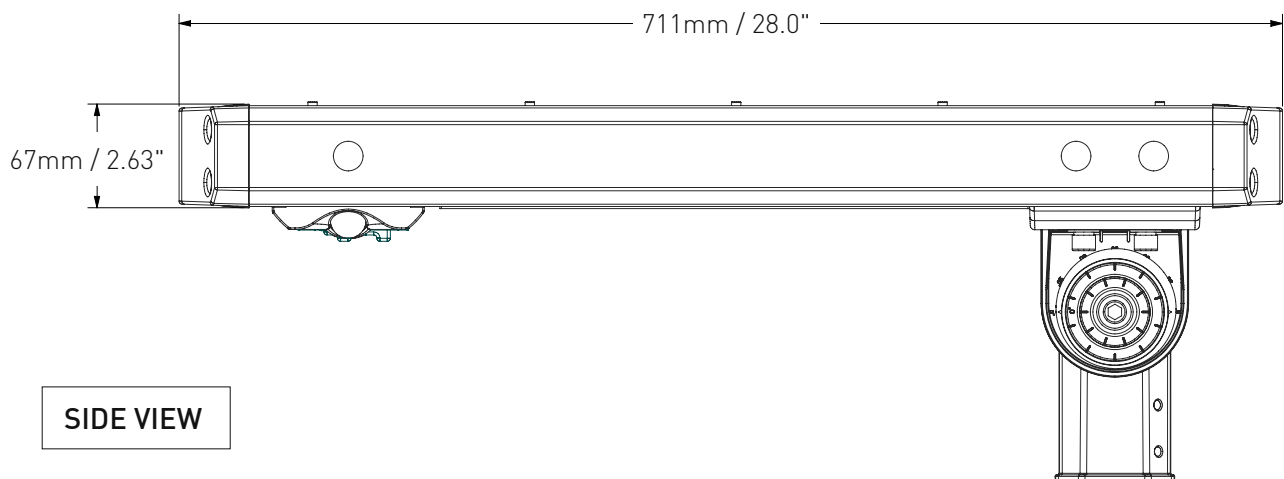
## ADJUSTABLE LED - ROTATION ANGLES



## PIR FUNCTION - TWIN DETECTION ZONE



## PRODUCT DIMENSIONS

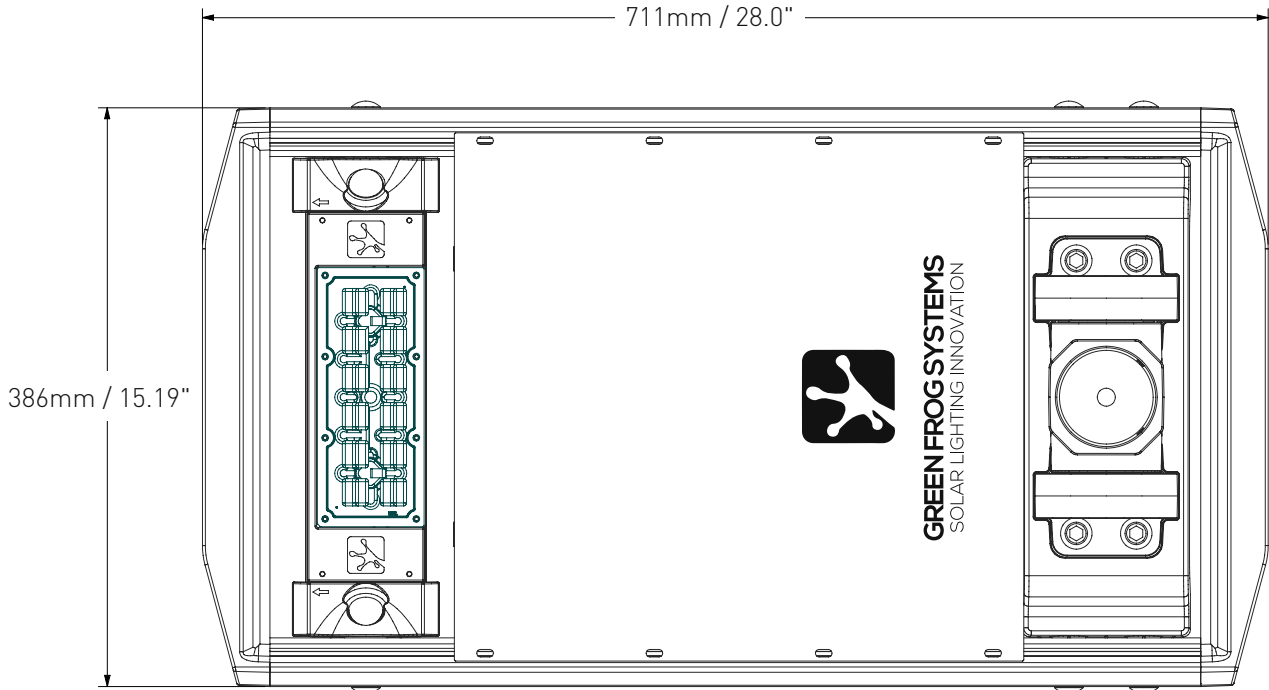


SIDE VIEW

# DEFENDER-55 ALL IN ONE SOLAR LIGHT



## PRODUCT DIMENSIONS (CONT.)



**BOTTOM VIEW**

