

4-6 m Mounting  
Height

Up to 55W  
10,285 Lm

5 Year Warranty

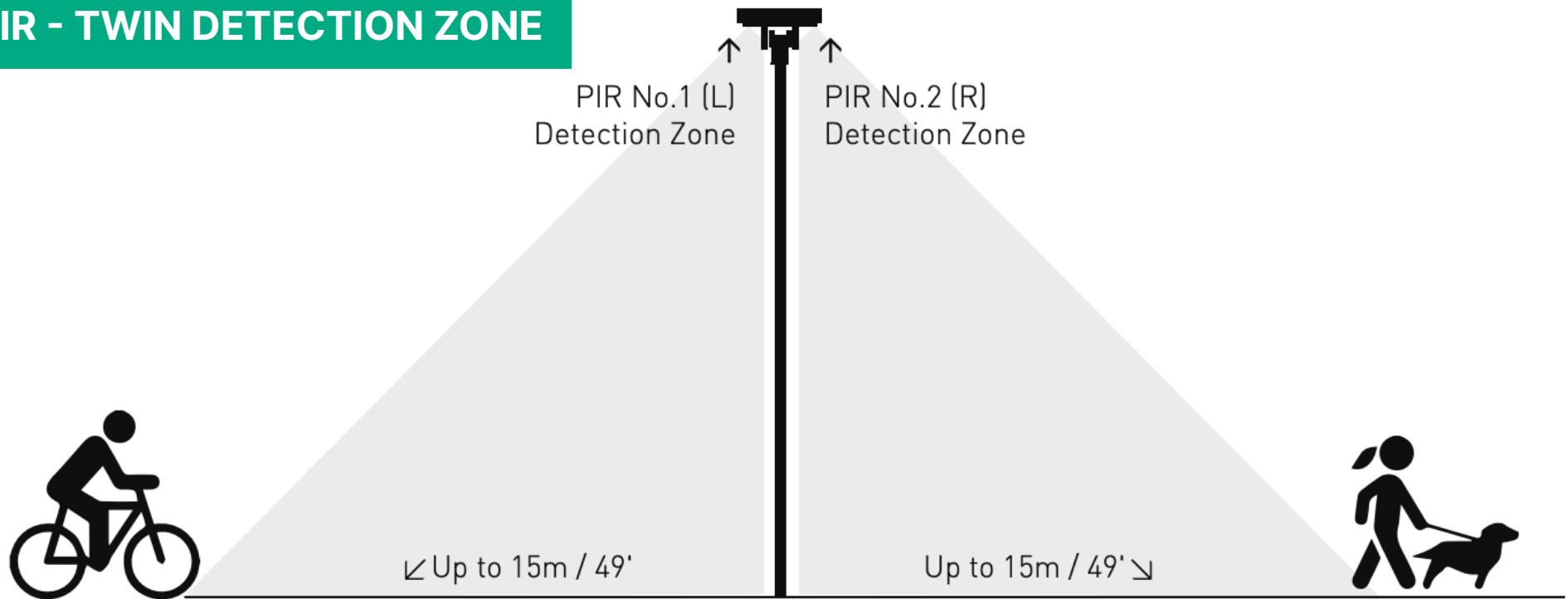


**ALL-IN-ONE**  
standalone design

# Defender

Solar Series

## PIR - TWIN DETECTION ZONE



The first solar lantern built for Britain, the DEFENDER-55 is the most advanced medium duty solar light available. Featuring adjustable angle LED's, twin PIR motion detection system and advanced nano-particle battery technology with fully programmable solar controller.

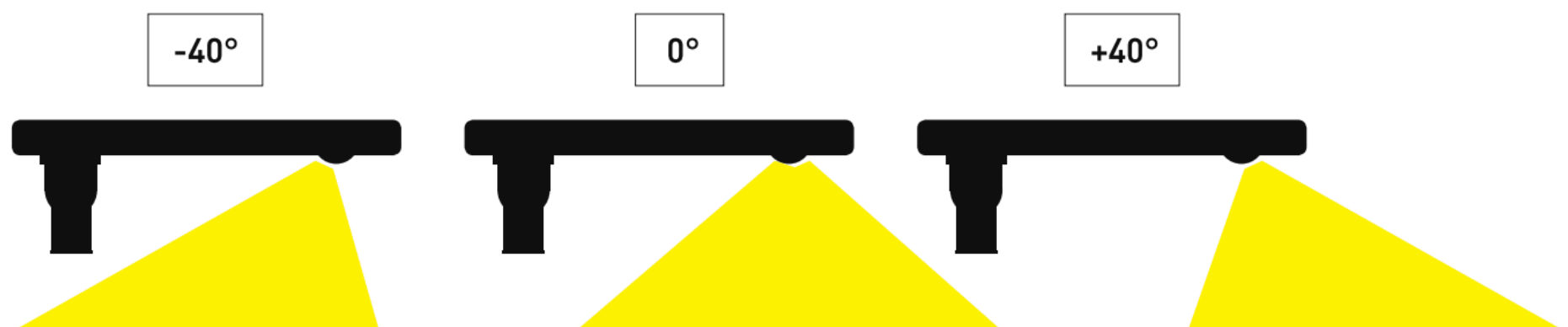
## Features

- **LED:** 12 x CREE XP-G3 LED
- **OPERATION:** Up to 55 Watt -10,285lm
- **CONTROL:** SAM (Solar Asset Monitoring)/Smart City ready
- **BATTERIES:** 12.8v 24Ah (307.2Wh) LiFePo4 battery with inbuilt BMS
- **SOLAR PANEL:** 32W mono-crystalline solar panel with 21% solar cell efficiency

## Benefits

- An "off-grid" solution, negating the need for extensive civil works or costly connection to the main grid.
- No running costs
- Zero maintenance system
- Self adjusting light levels
- Elegant design for suburban areas
- Flexible mounting options

## ADJUSTABLE LED



# Defender

Solar Series

## LED

12 x CREE XP-G3 LED configured in 2 × 6 LED arrangement

Up to 10,285lm - 55 Watt

4000K (Standard) / 3000K (Optional)

Rotatable LED Angle from -40° - +40°

## LENS

IK10 polycarbonate lens for an evenly distributed light pattern  
LEDIL T3 (Default / T2 - T5 optional)

## SOLAR PANEL

32 Watt mono-crystalline panel

21% efficiency

Rotatable LEDs allow for optimum angling of solar panel

## STANDARD MOUNTING HEIGHT

LED 6m / 19.68FT above grade

## BODY

6063-T5 Aluminium Alloy (Black)

Pole Mount Spigot Adaptor ID - 64mm / 2-3/8" Tennon

Mounting Angle Adjustable -90° - +90°

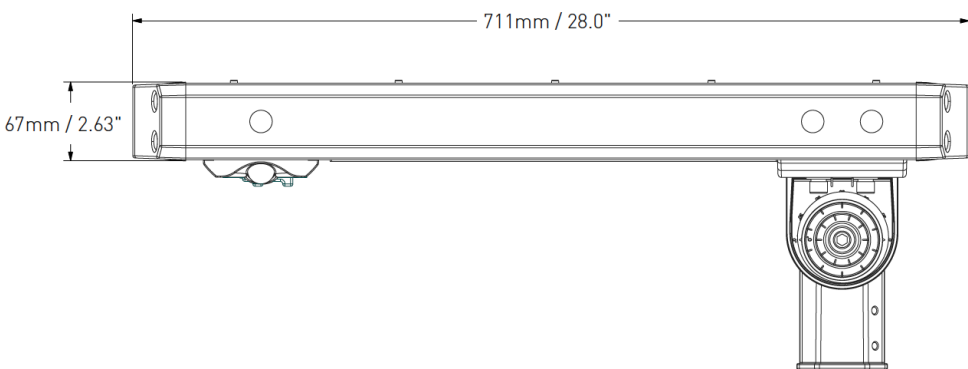
Sail Area / EPA 0.33m. / 3.55ft.

Product Dimensions 711L x 386W x 67H mm / 27.99"L x 15.19"W x 2.63"H

14 kg / 30.86 lb

## OPERATING CONDITIONS

-20°C to 60°C / -4°F to 158°F



## MOTION SENSOR

TWIN (2x) Panasonic PIR Sensors (L+R Mount)

<15m / <49" detection zone Activates for 30 sec

Reduces false triggering (trees, high winds and small rodents)

## UNIT WARRANTY

Complete Unit

5 Years

## BATTERY AND POWER

GFS designed Advanced Cell Technology (ACT) - LiFePO4 battery

12.8v / 24Ah (307.2Wh)

Integrated Battery Management System (BMS) featuring short circuit, over-temperature, over-charge/discharge and over-current protection

15VDC , 3 A charging port

11-15V, 3ADC power output

## CONTROL OPTIONS

Monitors system vitals including LED /solar / battery and temperature

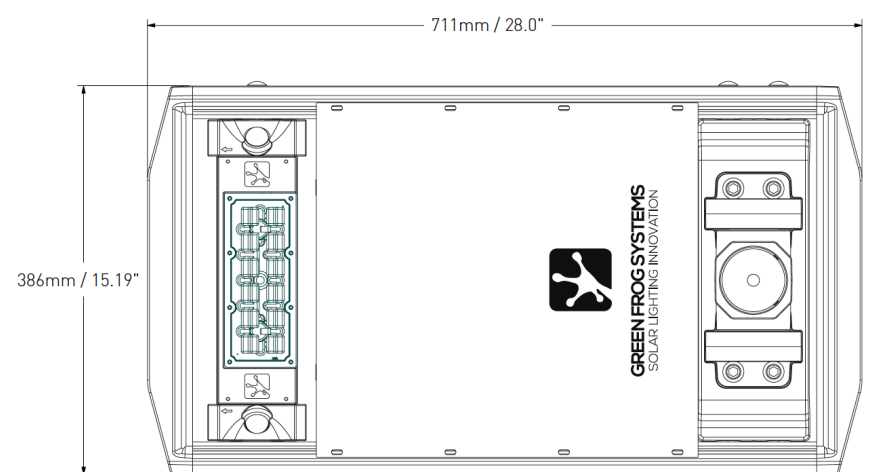
Adjustable dimmer settings to prolong light output in partially shaded environments or reduce light output in sensitive areas

MPPT (maximum power point tracking) charging with 99% tracking efficiency

SAM (Solar Asset Monitoring)/IOT Smart City ready (gateway and control antennas to be purchased seperately)

Real time clock for precise ON / OFF times

Custom multiple ON / OFF options per night with ability to set ON hours, before sunrise and dimming function.



# Defender

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