



# 21 NM RANGE LIGHT

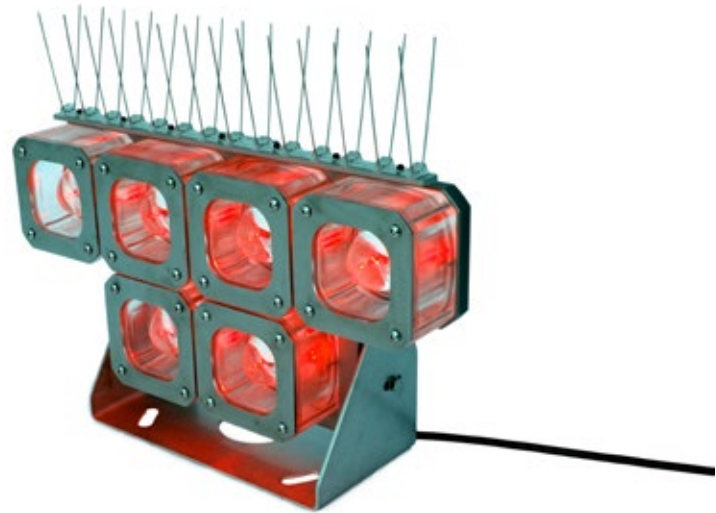
## VRL-74

AVAILABLE FROM 13 TO 22 NM RANGE AT 0.74T

**From 3° Vertical Profile**  
**From 3° Horizontal Profile**

The VRL-74 is a LED range light operating through an optical grade acrylic lens. The horizontal and vertical profiles can be widened with the use of spreader lenses.

The standard offering for the VRL-74 comes in 1-6 different lenses and any of 5 colours depending on your requirements.



Vega VRL-74 LED Range Light  
(6 optic with spreader lenses)



# OUTSTANDING FUNCTIONALITY AND FEATURES

The VRL-74 operates at high intensity, making it suitable for use as a lead or range light. With low power consumption and LEDs that require no maintenance, it is an ideal choice for sites that are remote and solar powered.

The long life LEDs are a great way to reduce your maintenance budget and also reduce running cost with significant energy savings.

A simple single-optic white range light can be seen at over 19 nautical miles while using less than 5W of energy.

By adding spreader lenses, both vertical and horizontal divergence can be increased, making the VRL-74 highly versatile. Spreader lenses are available in multiples of 3 degrees, with the smallest divergence being 3 degrees vertical and 3 degrees horizontal. This means the VRL-74 can be used in a broad range of locations and situations.

The VRL-74 is programmed as a single unit and can be programmed to operate day or night only or day and night continuously. The minimum night intensity is approximately 3% of the maximum intensity.

## PROGRAMMING FEATURES (WITH VEGA IR REMOTE PROGRAMMER) INCLUDE

- Multiple effective intensity settings for both day and night operation
- Day/night transition level settings
- Programmable flash characters
- One unique customer programmable flash character
- Synchronisation control, master/slave options
- Low voltage cut out
- Optional security code
- Automatic Schmidt-Clausen intensity correction for short flashes

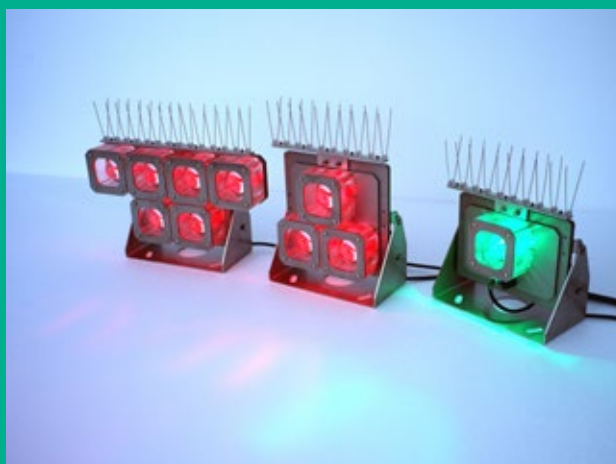
## MONITORING

The VRL-74 can be monitored in a number of ways:

- Using the VegaWeb internet monitoring unit via the data connector
- Using Vega AIS monitoring
- Using the optional alarm/monitor connection

## MAXIMUM INTENSITY WITHOUT SPREADER LENSES FITTED

Colour	1 Lens (cd)	6 Lens (cd)
White	80,000	480,000
Red	22,100	132,600
Green	37,700	226,200
Yellow	16,700	100,200
Blue	13,600	81,600



# SPECIFICATIONS

## OPTICAL SPECIFICATION

<b>Light Source</b>	High output LED
<b>Colours Available</b>	Red, White, Green, Yellow, Blue
<b>Peak Intensity</b>	White 480,000 cd
<b>(6 Optic)</b>	Red 132,600 cd
	Green 226,200 cd
	Yellow 100,200 cd
	Blue 81,600 cd
<b>Flash Characters</b>	Fully programmable (including presets)
<b>Horizontal Divergence</b>	3° at 50%
<b>Vertical Divergence</b>	3° at 50%
<b>Temperature control</b>	LEDs are monitored for excess temperature

## ENVIRONMENTAL

<b>Temperature</b>	-40° to 55° Celsius
<b>Intrusion Protection</b>	IP67
<b>Cooling Pressure</b>	Convection cooling heat sink
<b>Salt</b>	Continuous exposure to saltwater and spray
<b>Wind</b>	140KT
<b>Shock / Vibration</b>	Shock 40G in 3 axes, vibration 2G
<b>Ice Loading</b>	Greater than 40mm thickness on all horizontal surfaces; 250kg/m <sup>2</sup>

## MATERIALS

<b>Lens</b>	Machined cast acrylic
<b>Bird Spikes</b>	316 stainless steel
<b>Heatsink/Frame</b>	DT 5008 marine grade aluminium anodized to 25 <sup>o</sup> µm
<b>Base</b>	Marine grade stainless steel

## ELECTRICAL PERFORMANCE

<b>Voltage</b>	Supply 12 VDC or 24 VDC (10V-30V)
<b>Battery Protection</b>	Programmable low voltage cut off Reverse polarity protected
<b>Day/Night Transition</b>	Adjustable levels

## STANDARDS

**Emissions:** EN55015:2006 radiated and conducted emissions

**Immunity:** EN61000-4-2:2001 Electrostatic Discharge Immunity Level 4 ,EN61000-4-3:2002 Radiation Immunity Class 1, EN61000-4-5:1995 Class 3 Surge Immunity, 0.5KV lead to lead, FCC 47 CFR Section 15 Class A

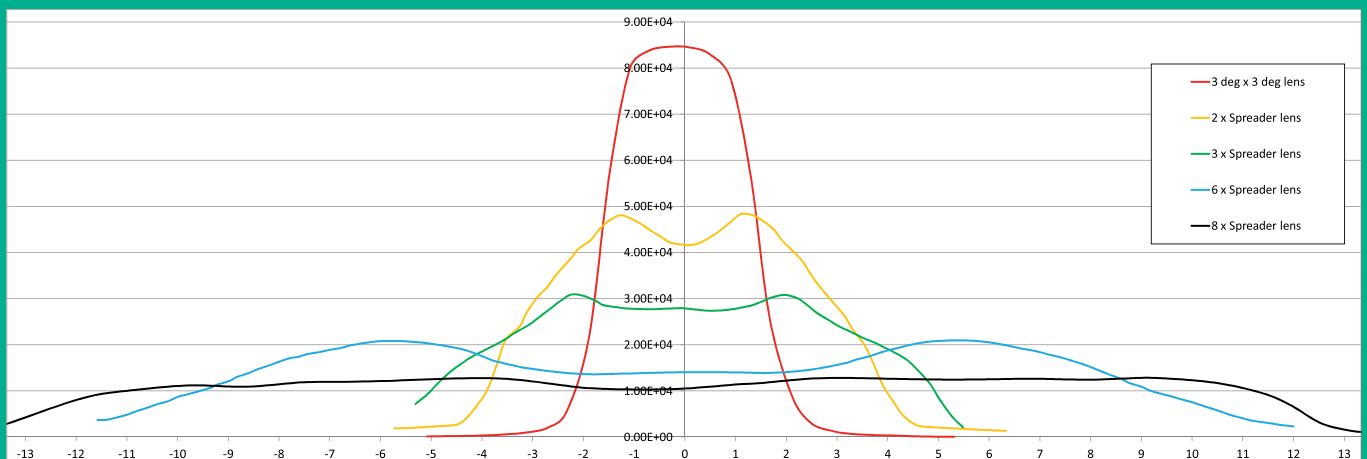
**Shock:** MIL-STD-202G Method 213B Cond H

**Vibration:** MIL-STD-202G Method 204D Cond B

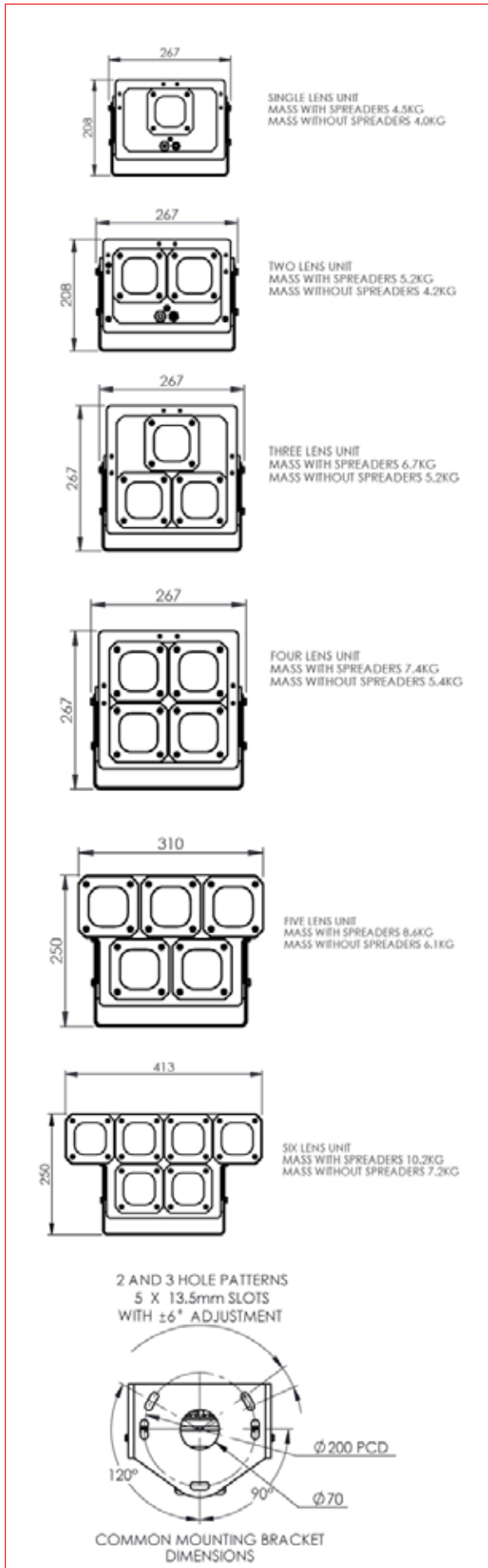
**Optical Test:** IALA Recommendation E-122(2001) and E-200-3 Part 3 (2008)

**Daylight:** IALA Recommendation 1038

## VERTICAL AND HORIZONTAL PROFILES



# DIMENSIONS & WEIGHTS



# PARTS FOR ORDERING

## DESCRIPTION

VRL-74 LED Range Light

## PRODUCT CODE FORMAT

VRL-74-C-N-X-Y

### Where C (Colour)

- = Y (Yellow Light)
- = W (White Light)
- = R (Red Light)
- = G (Green Light)
- = B (Blue Light)

### Where N (Optics)

- = Number of optics

### Where X (Spreaders)

- = Horizontal multiplier

### Where Y (Spreaders)

- = Vertical multiplier

## OPTIONAL EXTRAS

Computer Programmer IRDA	<b>Prog-01</b>
An extra Infrared Remote	<b>Remote -02</b>
Gun sight alignment tool	<b>174-041</b>
Telescopic sight mount	<b>174-040</b>



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