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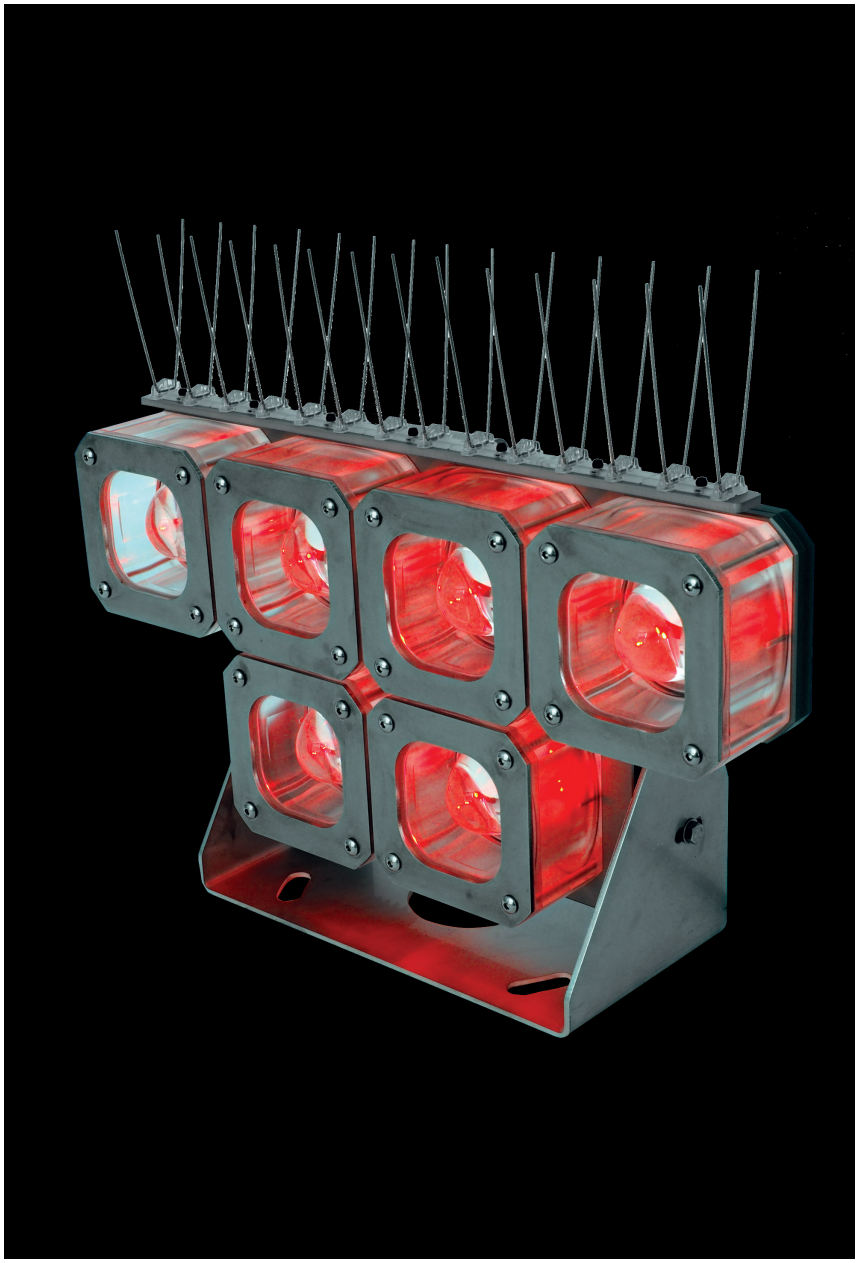
VRL-74

13NM - 22 NM@ 0.74T

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.

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



Monitoring
• **Using the VegaWeb internet monitoring unit via the data**
• **Using Vega AIS monitoring**
• **Using the optional alarm/monitor connection**

Functionaltity and Features VRL-74

About the VRL-74

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.

Standard

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

Technical Specification VRL-74

Optical Performance

Maximum intensity					
1 lens	22100cd	37700cd	16700cd	80000cd	13600cd
6 lens	132000cd	226200cd	100200cd	480000cd	81600cd

Vertical divergence	3° @ 50%
Horizontal divergence	3° @ 50%
Light source	High output LED
Temperature control	LED's monitored for excess temperature
Colours	Red, Green, Yellow, White, Blue
Flash character	Fully programmable (incl. presets)

Materials

Lens	Machined case acrylic
Bird spike	316 stainless steel
Base	Marine grade stainless steel
Heatsink/Frame	DT 5008 marine grade aluminium anodised to 20°µm

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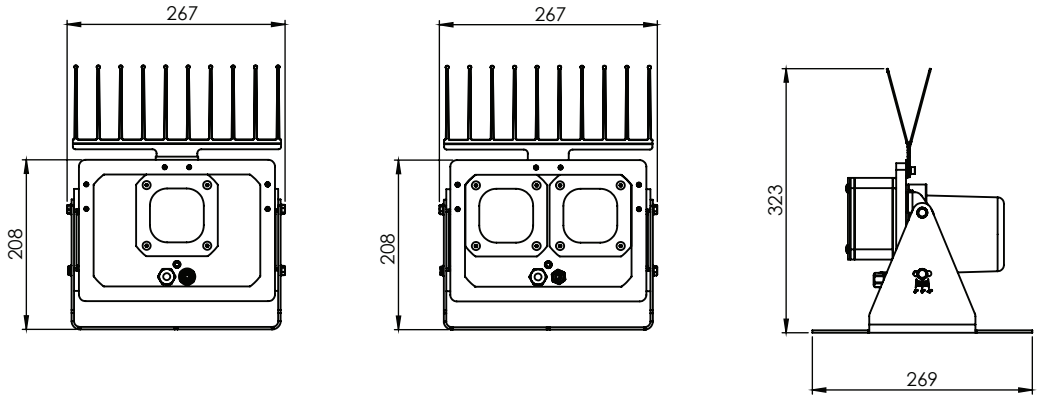
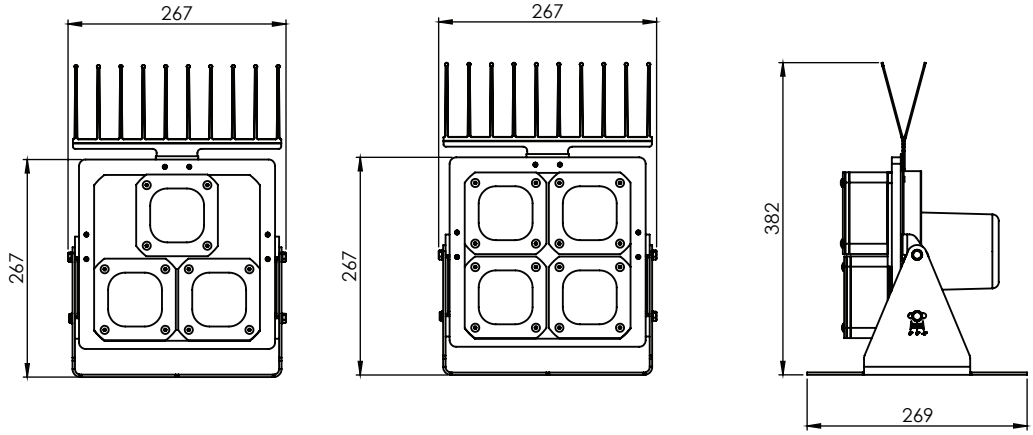
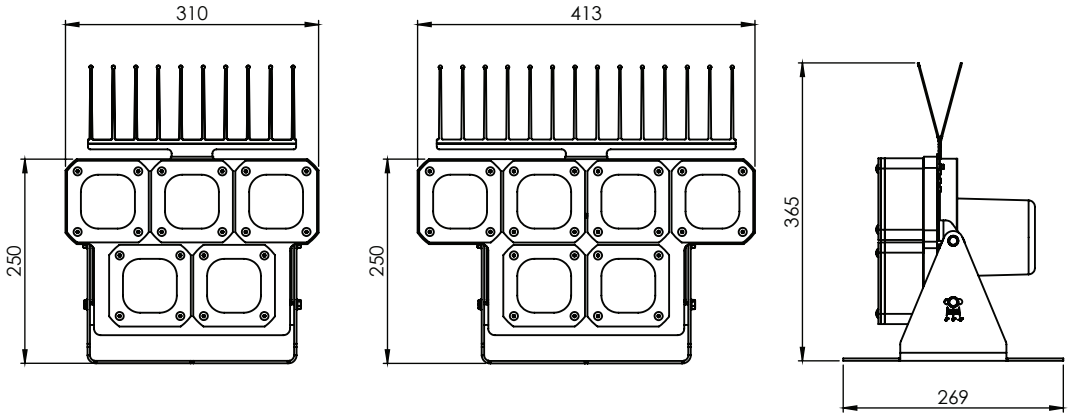
1-2 lens unit

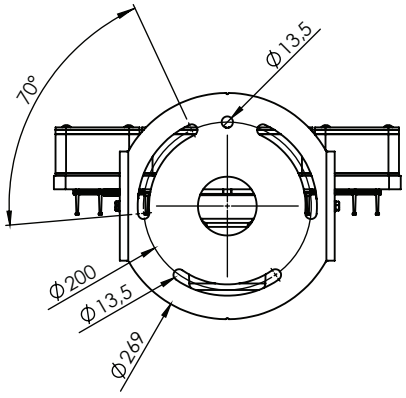


3-4 lens unit



5-6 lens unit





Environmental

Degree of Protection	IP67
Temperature	-30°C to 50°C
Salt	Continuous exposure to salt water and spray
Ice Loading	Greater than 40mm thickness on all horizontal surfaces; 250kg/m^2
Shock/Vibration	40G shock in 3 axes - 2G vibration

Electrical performance

Solar power (SS)	12VDC or 24VDC (10V - 30V)
Battery Protection	Programmable low voltage cut-off Reverse polarity protected
Day/Night transition	Adjustable level

Order Overview VRL-74

Option matrix

Remote-02	Infrared remote
174-041	Gun sight alignment tool
GS	Internal GPS sync option
DP	Data port

Product code

Code VRL-74-C-N-X-Y	**Note**
C	Colour (G, R, W, Y, B)
N	Number of optics
X	Spreaders - Horizontal multiplier
Y	Spreaders - Vertical multiplier