

INTRODUCTION

Alphino 4W1 Weatherproof Beacon Strobe Lights are easily configurable multicolor beacons in a single housing unit is certified to IP67 in accordance of IEC 60529. Beacon tested to be dust-tight (Category 1 with vacuum pump connected) & resistant to water ingress from powerful water jets. This test further demonstrates Alphino beacon's ability to reliably perform in the harshest environments.

4W1 Beacon with Xenon Lamp: Available with variety of energy level from 5 to 30 Joules. As default, flash rate is set at 60 per minute.

4W1 Beacon with LED Lamp: Available with LEDs with longer lifetimes. User can select 3-in-1 function (steady, flash and running/rotating) and interval by setting switch combinations which are provided on circuit board.

4W1 Beacon with Fluorescent Lamp: Available with 8W (or) 11W energy level. Lamps used are flicker free with instant "on" feature as well as super energy-efficient with energy saving up to 70%.

Installation

Mounting

Alphino 4W1 Beacon Strobe Lights can be mounted in any direction to walls or other surfaces. Four mounting bolts/nuts (size M8, not provided) are required for the mounting. Figure 1 shows some example positions of the mounting positions. See **Fixing Centers** for the mounting holes.

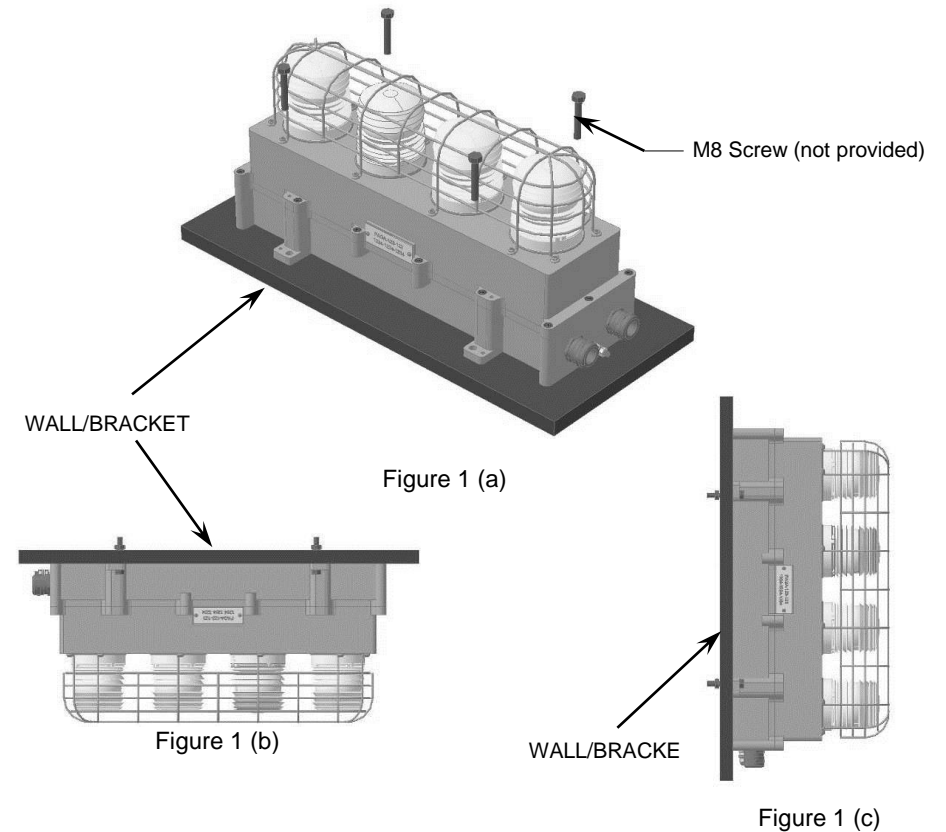


Figure 1(a), 1(b) and 1(c): Examples of mounting beacon to various type of surfaces/directions

Notes:

- (1) According to material type of intended surface at where the beacon to be mounted, please use proper length of screw to withhold the beacon safely at the surface.
- (2) Additional fixture or washers and nuts (M8) may be used depending on type of mounting surface to ensure the beacon is mounted with proper safety.

Cable Selection for Power Supply

Alphino 4W1 Beacon Strobe Lights should only be operated with the appropriate power supply. Power supply cables should be chosen based on the capacity of the strobe lights connected to the line.

Table 1 & 2 shows rated input voltages, operation voltages and peak currents of various models.

Note: Peak current indicated is for one lamp only.

Xenon Lamp:

Operating Voltage	Average Current (mA)		
	5J	10J	15J
110VAC	219	272	305
230VAC	220	218	189

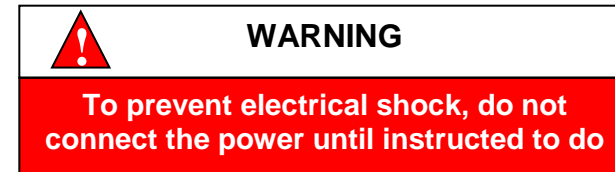
Table 1: Xenon lamp Average current

LED Lamp:

Operating Voltage	Peak Current (mA) under Steady Operation Mode
12VDC	600
24VDC	300
48VDC	160
110VAC	150
230VAC	100

Table 2: LED lamp peak current

Cable Termination



Alphino 4W1 Beacon Strobe Lights can either be powered directly by AC or DC sources or be initiated by telephone lines (for single color with telephone initiation model). Please follow the steps below to terminate field wirings.

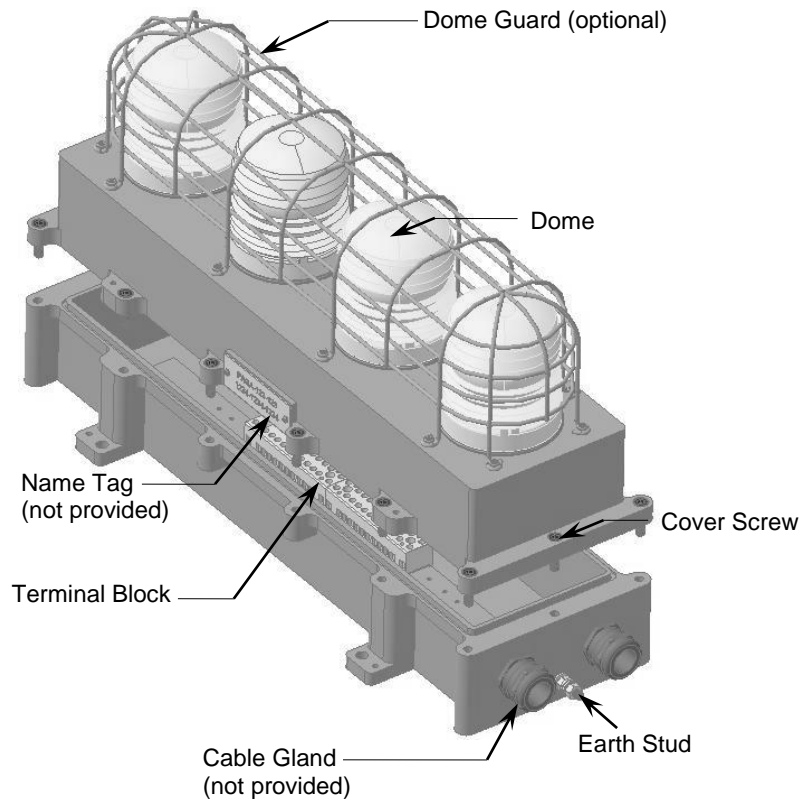


Figure 2: Various parts of an Alphino 4W1 Beacon Strobe Light

- 1) Unscrew and remove the enclosure cover.
- 2) Terminate field wires as shown in Figure 3 or 4.
- 3) Ensure all field wires are secured to the terminal block.
- 4) Use suitable cable gland or stopping plugs.
- 5) Re-mount the enclosure cover and tighten the screws.
- 6) Apply appropriate power supply to the strobe light and check for correct operations.

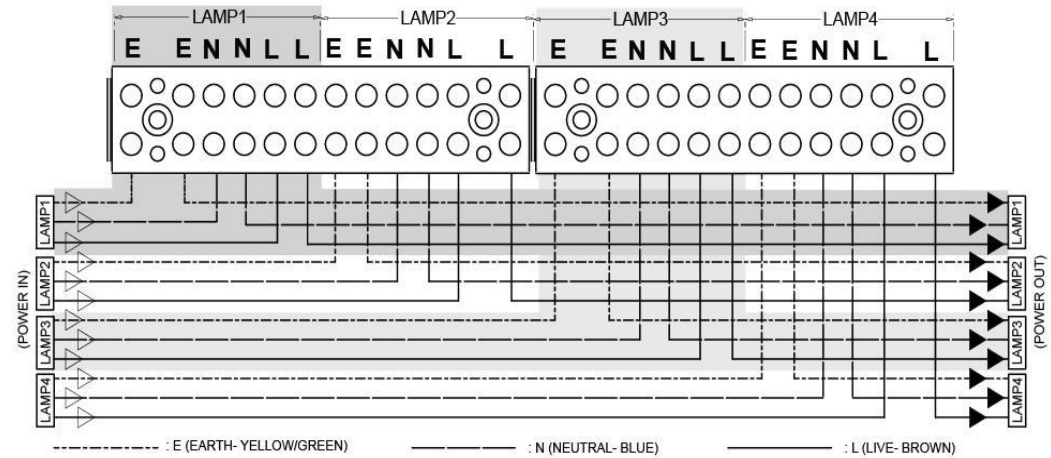


Figure 3(a): Terminal block connection for 4W1 beacon with AC voltage supply

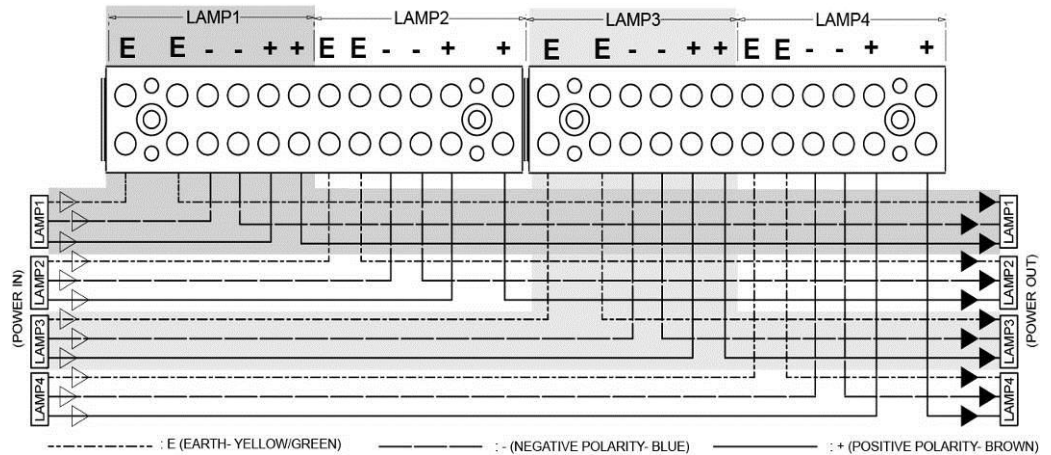


Figure 3(b): Terminal block connection for 4W1 beacon with DC voltage supply

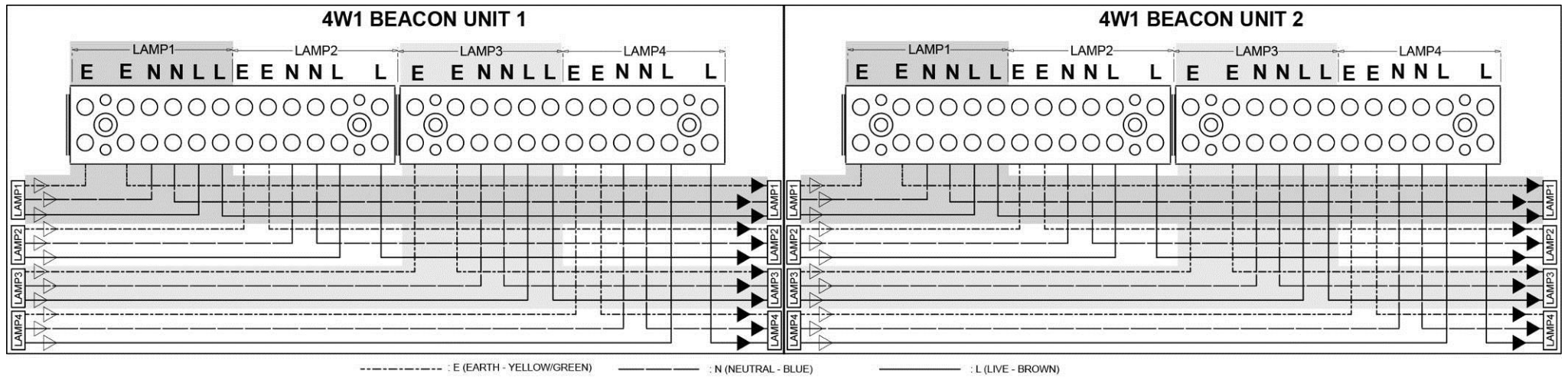


Figure 4(a): Terminal block connection for multiple units with AC voltage supply

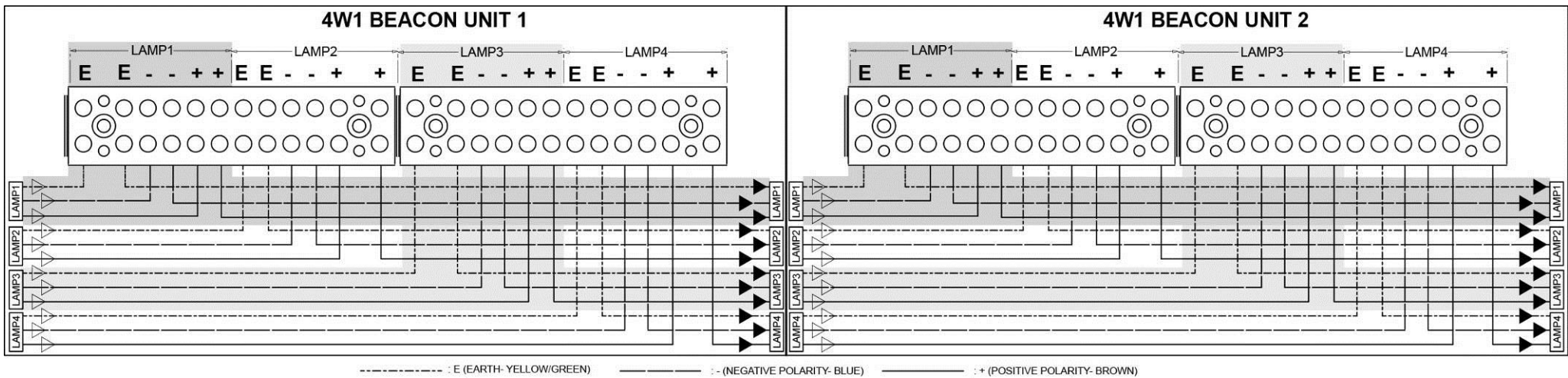


Figure 4(b): Terminal block connection for multiple units with DC voltage supply

Operation

Rate and Mode Adjustment

Alphino Beacon Lights support selectable rates and mode. User can select the required flash/rotate rate, which ranges from 30 to 180 flash/revolution per minute, by simply selecting the switch at SW1 the provided.

Figure 5 shows the various combinations of setting of the Beacon Light rates and modes. Figure 6 shows the position on the main PCB at which the switch is located.

Table 3: Terminal block label for **AC** version

Label	Description
E	Earth
N	Neutral
L	Live

Table 4: Terminal block label for **DC** version

Label	Description
E	Earth
-	Negative(for DC)
+	Positive (for DC)

Safety Grounding

Alphino 4W1 Beacon Strobe Lights are designed to provide good grounding to ensure safety. Earth stud is provided for external grounding. (see Figure 2)

The earth stud must be properly earthed before energizing the unit.

Comb.	Switch	Rate	mode
1		0	Steady
2		0	Steady
3		30 rpm	Rotation
4		60 rpm	Rotation
5		80 rpm	Rotation
6		100 rpm	Rotation
7		120 rpm	Rotation
8		150 rpm	Rotation
9		180 rpm	Rotation
10		30 fpm	Flash
11		60 fpm	Flash
12		80 fpm	Flash
13		100 fpm	Flash
14		120 fpm	Flash
15		150 fpm	Flash
16		180 fpm	Flash

Figure 5: Switch combinations for rate and mode setting

- 1) Use **dome removal tool** (sold separately) to release existing dome. Turn counter clockwise direction to release the dome.
- 2) Replace a O-Ring for the dome if necessary.
- 3) Make sure the new dome is aligned with the O-Ring.
- 4) Secure the dome to the enclosure by tightening the dome in clockwise direction. Ensure the O-Ring is in place before tightening.

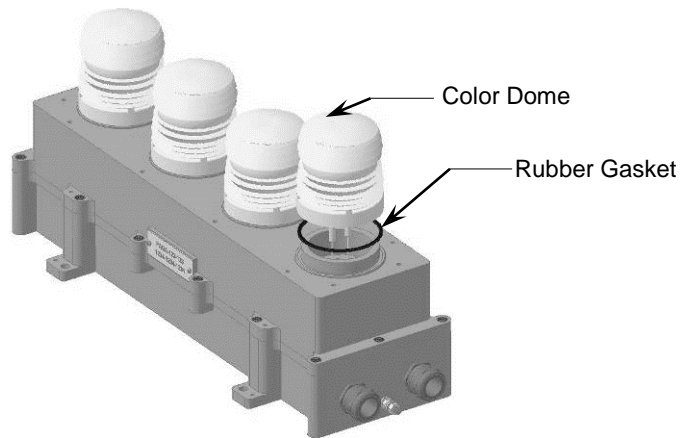


Figure 7: Assembling domes

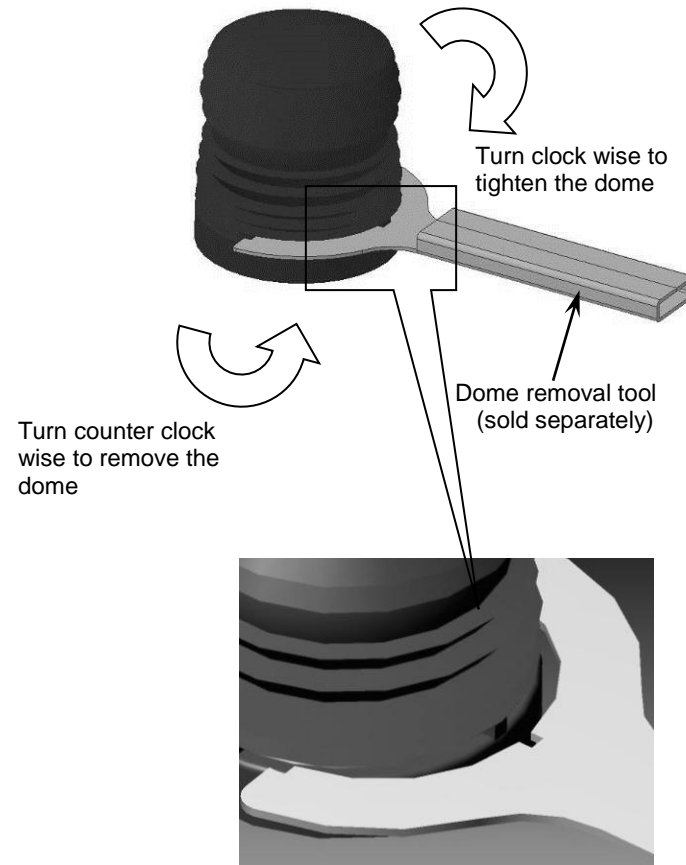


Figure 8: Using dome assemble/ removal tool

(*Note: Dome assemble/removal tools is sold separately)

Maintenance

Alphino Beacon Strobe Lights require little or no maintenance during their working life. However, should there be abnormal conditions in a unit due to plant damage or accident, visual inspection of the unit shall then be carried out. If a fault occurs, it is recommended that the unit be returned to Alphino Pte Ltd for repair.

Dimensions

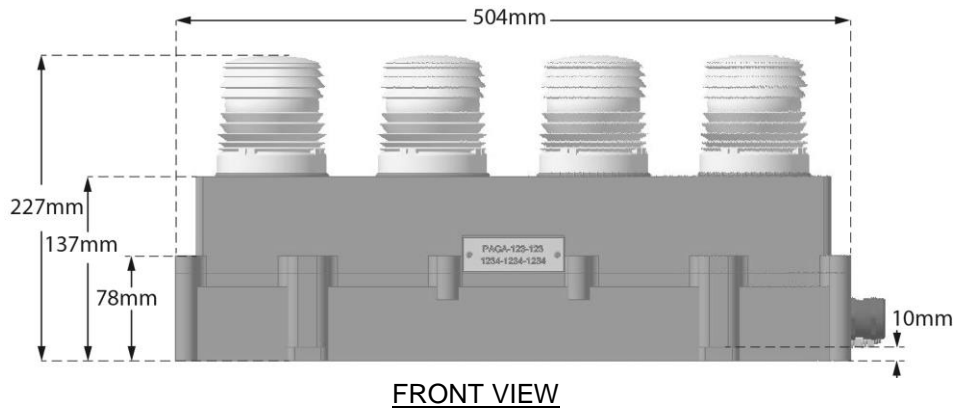


Figure 9: Front and side views without dome guard
(Note: All dimensions shown are in mm)

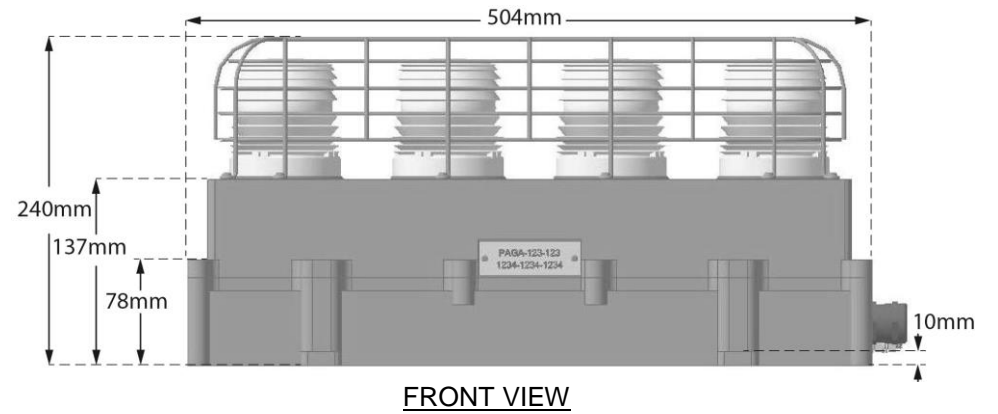


Figure 10: Front and side views with dome guard
(Note: All dimensions shown are in mm)

Fixing Centers

4W1 beacon requires 4 pieces of M8 screws for mounting. Figure 11 shows the mounting centers.

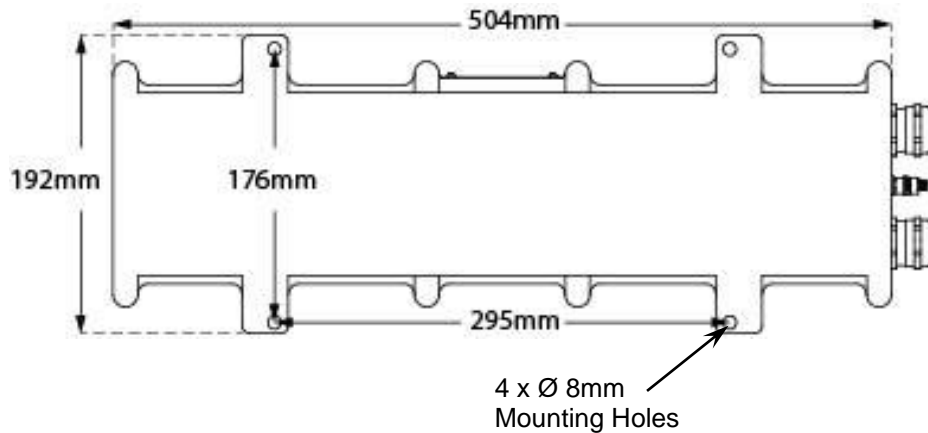


Figure 11: Bottom view which shows mounting holes

Fixing Name Tag

4W1 beacon requires 2 pieces of M3 screws to fix the name tag. Figure 12 shows the mounting centers

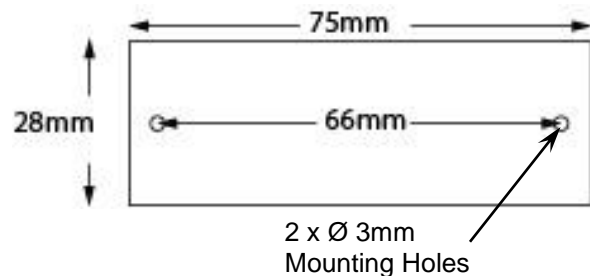


Figure 12: Outline view which shows mounting holes of recommended name tag size.

(Note: Name Tag is not provided with beacon unit)

Warranty Policy

ONE YEAR LIMITED WARRANTY

Alphino Pte Ltd warrants its products to be free from defects in material and workmanship for a period of 1 year from the date of delivery. If a product or any part that proves to be defective in material or workmanship under normal installation, use and service during the warranty period, Alphino Pte Ltd will, at its sole option, repair or replace the product subject to the terms and conditions outlined below.

1. The product is returned to Alphino Pte Ltd or one of its authorized distributors with transportation charges prepaid.
2. Replacement Product or parts may include remanufactured or refurbished parts or components.
3. The replacement unit will be covered by the balance of the time remaining on the customer's original limited warranty.

Returned products must include a copy of the tax invoice. In the absence of tax invoice or proof of purchase, otherwise Alphino Pte Ltd reserves the right to charge for repair cost.

WARRANTY LIMITATIONS

This warranty shall be void if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than a Alphino Pte Ltd employee or authorized service facility, or any use in violation of instructions furnished by Alphino Pte Ltd.



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