

# GNExB2LD2 LED Multifunction Beacon

The GNExB2LD2 is a globally approved explosion proof high output LED multifunction beacon. The robust IP66 corrosion proof GRP enclosure and extended temperature range ensures suitability for all Zone 1, 2, 21 & 22 and Class I Div 2 hazardous location applications.

The GNExB2LD2 utilises an array of high power Cree® LED's, orientated to optimise visibility in any direction. The beacon can be configured as a steady beacon with a light output of up to 174 candela. Alternatively, for warning applications, five flashing modes, with a light output of up to 338 candela. DC voltage versions feature three remotely selectable stages enabling multiple warnings to be signalled. The field replaceable colour filter enhances the light output and is constructed from UV stable PC. SIL1 & SIL2 Route 2H compliant to IEC61508 (2010) as standard.

## Features

- Five flash rates: 1Hz, 1.33Hz, 2Hz, double and triple flash.
- Automatic synchronisation on multi-beacon systems
- High and low power Steady modes
- Three remotely selectable stages/channels on DC versions.
- A4 316 Stainless Steel guard included as standard
- UV stable polycarbonate lens colour filter - field replaceable
- 3 x cable entries
- Stopping plugs included
- Robust corrosion proof GRP (glass reinforced polyester) enclosure

## Approvals

- UL/cUL/ULC - File ref: E245313
- IECEx UL 15.0003X
- ATEX DEMKO 15ATEX1448X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252\_21
- PESO CCOE certified: P579164
- INMETRO IEx 20.0049X
- SIL1 & SIL2 compliant to IEC61508 (2010)

## Coding

- IECEx / ATEX
  - II 2G Ex db IIC T5 Gb Ta -50°C to +70°C
  - II 2G Ex db IIC T6 Gb Ta -50°C to +65°C
  - II 2D Ex tb IIIC T85°C Db Ta -50°C to +70°C
- NEC Class / Zone
  - Class I Zone 1 AEx db IIC T5 Ta -50°C to +70°C
  - Class I Zone 1 AEx db IIC T6 Ta -50°C to +65°C
- CEC Class / Zone
  - Ex db IIC T5 Ta -50°C to +70°C
  - Ex db IIC T6 Ta -50°C to +65°C
- NEC / CEC Class / Div
  - Class I Div 2 Group ABCD T5 Ta -50°C to +70°C
  - Class I Div 2 Group ABCD T6 Ta -50°C to +65°C



## Specification

Source:	Array of 4 x High Power Cree® LED's
Modes:	1Hz flash (60 fpm) 1.5Hz flash (90 fpm) 2Hz flash (120 fpm) Double strike flash Triple strike flash High Power Steady Low Power Steady
Eff. Intensity cd:	338 cd - 1Hz flash
Eff. Intensity cd:	174 cd - High Power Steady
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Voltage DC:	24V dc (18-30Vdc)
Voltage AC:	115Vac (110-120Vac), 230Vac (220-240Vac)
In-rush @ 24Vdc:	1890mA within 0.22ms
LED life:	60,000 hours+
Safety Integrity Level:	SIL1 and SIL2 Route 2H IEC61508 (2010)
Ingress protection:	IP rating per EN60529:IP66/67 Type rating per UL50E/NEMA250:4/4X/3R/13
Lens material:	High impact Borosilicate glass
Enclosure material:	UV stable GRP (glass reinforced polyester)
Enclosure colour:	Natural Red
Enclosure finish:	Natural - can be painted in alternative colours
Cable entries:	Side: 3 x M20x1.5mm Stopping plugs included
Stopping plugs:	Brass, Nickel Plated or Stainless Steel
Terminals:	0.5 - 2.5mm <sup>2</sup> (20-14 AWG) Duplicated terminals
Ground/Earth stud:	M4
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted
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Enclosure volume:	<2 litres
Installation temp:	-50° to +70°C (-58°F to +158°F)
Storage temp:	-50° to +70°C (-58°F to +158°F)
Relative humidity:	95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist
Weight:	3.5kg/7.7lbs
*All candela data is representative of performance with clear lens at optimum voltage.	

## Part Codes

Part Code:	Identifier:	Description:
Product type:	GNEXB2	
Type:	LD2	LED Multifunction Beacon
Voltage:	DC024 AC115 AC230	24Vdc (18-30Vdc) 115Vac (110-120Vac) 230Vac (220-240Vac)
Cable entries: [e]	A B C D E F G H I J	3 x M20x1.5mm 2 × 1/2" NPT - adaptors 2 × 3/4" NPT - adaptors 2 x M25x1.5mm - adaptors 1 × 1/2" NPT - adaptor 1 × 3/4" NPT - adaptor 1 x M25x1.5mm - adaptor 3 × 1/2" NPT - adaptors 3 × 3/4" NPT - adaptors 3 x M25x1.5mm - adaptors
Stopping plug/ adaptor material: [m]	B N S	Brass Nickel plated brass Stainless steel
Guard material: [s]	1 3	A4 316 Stainless Steel A4 316 St/St with Equip. Tag
Product version: [v]	A	UL, cUL, IECEx, ATEX, Ex EAC, PESO, INMETRO - SIL1 & SIL2
Product option: [o]	1 X	Standard product Custom configuration - contact E2S
Enclosure colour: [x]	R S	Red Special colour - contact E2S
Lens colour: [y]	A B C G M R Y	Amber Blue Clear Green Magenta Red Yellow
Accessories:	SP65-0001-A4 SP65-0003-A4	Pole Mount Bracket Kit St/St A4 (316) Sunshade - St/St A4 (316)

## Multi-function patterns

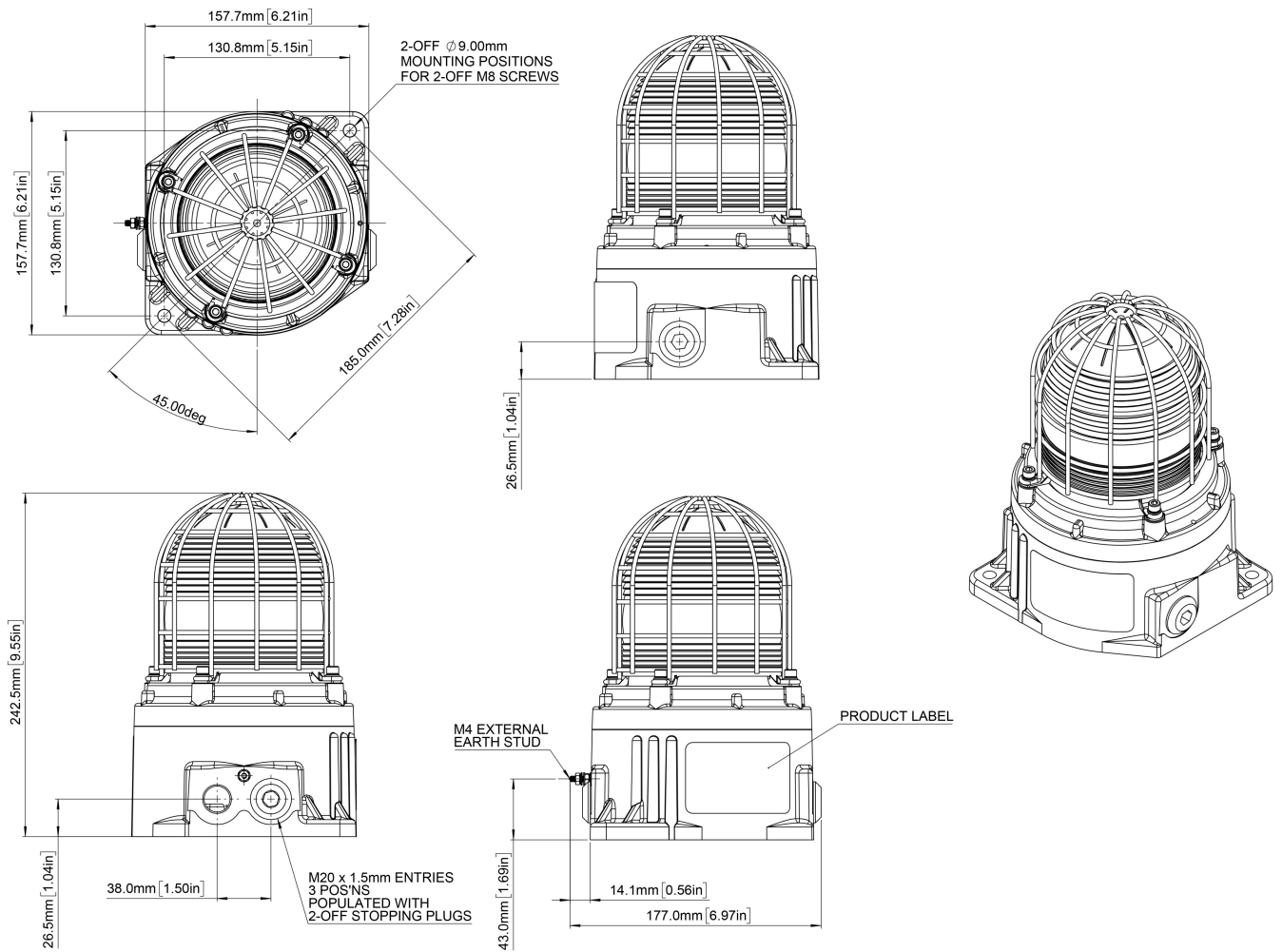
Stage 1: [On board]	Stage 2: [Remote]	Stage 3: [Remote]
Steady High Power	Flashing 1Hz	Triple Strike
Steady Low Power	Flashing 1Hz	Triple Strike
Flashing 1Hz	2x Flash 2Hz	Triple Strike
Flashing 1.5Hz	Flashing 2Hz	Double Strike
Flashing 2Hz	Triple Strike	Triple Strike
Double Strike	Steady High Power	Triple Strike
Triple Strike	Flashing 2Hz	Double Strike

Note: Remote second and third stage on DC units only

Double strike: 150ms on, 150ms off x 2, 600ms off  
Triple strike: 150ms on, 150ms off x 3, 600ms off

## Current Consumption

Nominal Voltage:	Voltage range:	Steady High Power Nominal current:	Steady Low Power Nominal current:	Flashing 1Hz Nominal current:	Max. current:	In rush:
24Vdc	18-30Vdc	240mA	134mA	110mA	500mA	1890mA <0.22ms
115Vac	110-120Vac 50/60Hz	95mA	78mA	90mA	180mA	11150mA < 12ms
230Vac	220-240Vac 50/60Hz	48mA	37mA	45mA	100mA	670mA <12ms



## Assemblies

The GNExB2LD2 is available as a plated assembly configured with a GNEx type alarm horn sounder and additional GNEx type Xenon strobe or LED beacons with or without a GNExJ2 Ex d junction box. Contact E2S for further information.