

# GNExB2X21 Xenon Strobe Beacon

The GNExB2X21 is an IECEx & ATEX approved explosion proof 21 Joule Xenon beacon. The robust corrosion proof GRP enclosure and extended temperature range ensures suitability for all Zone 1, 2, 21 & 22 hazardous location applications.

The GNExB2X21 beacon produces over 900cd effective – a very high output Xenon strobe flash as required for efficient signalling in environments with elevated levels of ambient light. The optically enhanced field replaceable colour filter optimises the strobe output and is constructed from UV stable PC. The GRP enclosure features a threaded flame path, triple cable entries and a large termination area – all of which significantly reduce installation time. SIL1 & SIL2 Route 2H compliant to IEC61508 (2010) as standard.

## Features

- Four flash rates: 1Hz, 1.3Hz, 1.5Hz & double flash
- Automatic synchronisation on multi-beacon systems
- User replaceable Xenon tube secured against shock & vibration
- 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

- IECEx UL 15.0003X
- ATEX DEMKO 15ATEX1448X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252\_21
- PESO CCOE certified: P452946 & P471510
- INMETRO IEx 20.0049X
- SIL1 & SIL2 compliant to IEC61508 (2010)

## Coding

- IECEx / ATEX
  - II 2G Ex db IIC Gb T4 Ta -50°C to +65°C (AC: +55°C)
  - II 2G Ex db IIC Gb T3 Ta -50°C to +70°C (AC: +65°C)
  - II 2D Ex tb IIIC Db T135°C Ta -50°C to +70°C (AC: T138°C)



## Specification

Source:	Xenon Strobe
Energy:	21 Joules (21Ws)
Flash rates:	1Hz flash (60 fpm) 1.3Hz flash (80 fpm) 1.5Hz flash (90 fpm) Double flash (120 fpm)
Eff. Intensity cd:	1,115.57 cd – measured ref to I.E.S
Peak Candela:	252,852 cd – measured ref to I.E.S
Eff. Intensity cd:	1,050 cd – calculated from energy (J)
Peak Candela:	2,100,000 cd – calculated from energy (J)
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Voltage DC:	24V dc (20-28Vdc), 48Vdc (42-54Vdc)
Voltage AC:	115Vac (110-120Vac), 230Vac (220-240Vac)
In-rush:	1508mA within 5ms @ 24Vdc
Safety Integrity Level:	SIL1 and SIL2 Route 2H IEC61508 (2010)
Ingress protection:	IP rating per EN60529:IP66/67
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
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2W, or 3k3 Ohm 0.5W resistor or diode (DC versions) can be fitted
Ground/Earth stud:	M4
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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
MTBF DC:	155.52 years / 1,362,398 hours – MIL 217
MTBF AC:	246.02 years / 2,155,173 hours – MIL 217
Weight:	3.5kg/7.7lbs

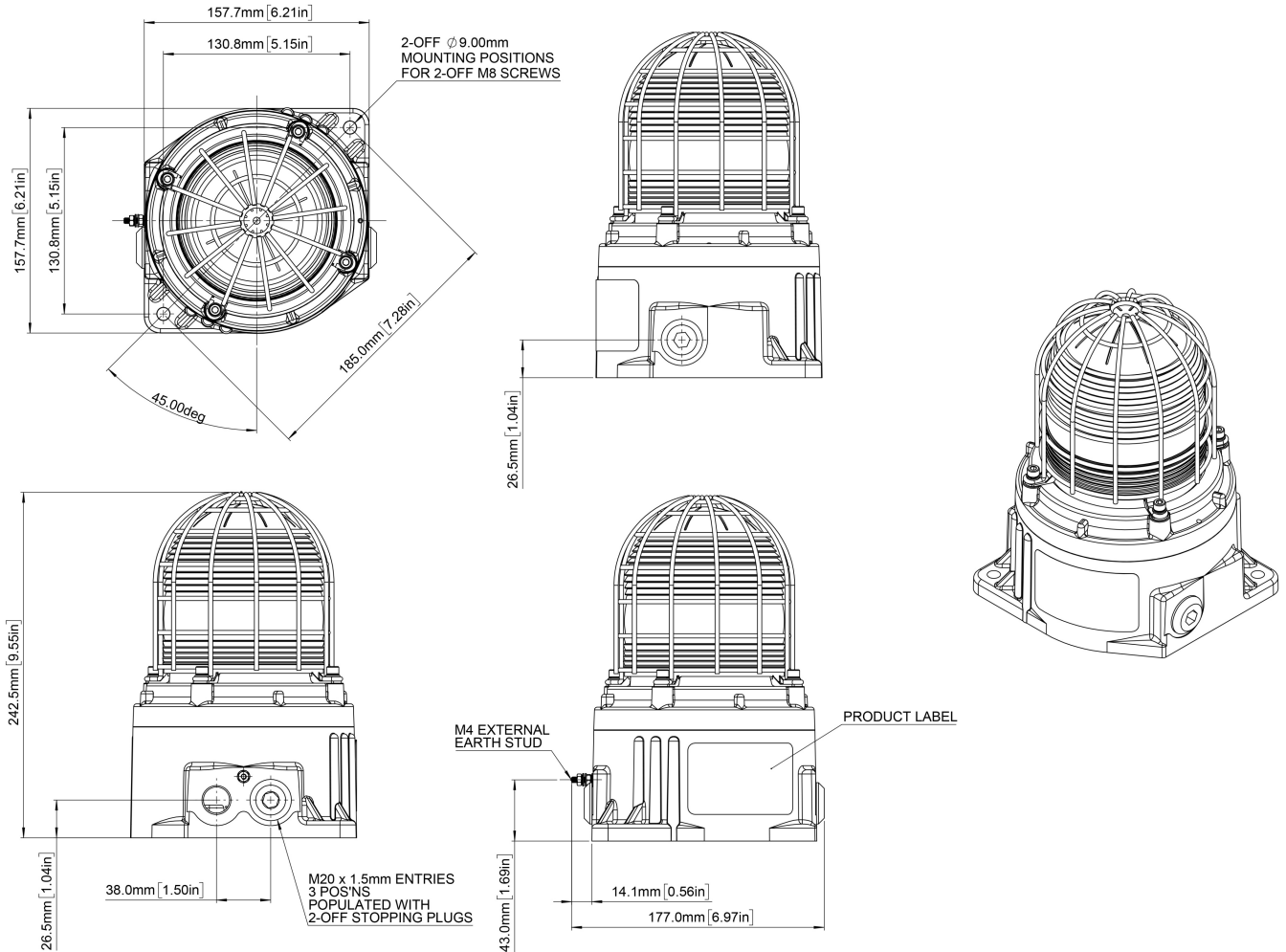
\*All candela data is representative of performance with clear lens at optimum voltage.

## Part Codes

Part Code:	Identifier:	Description:
Product type:	GNExB2	
Type:	X21	Xenon Beacon – 21 Joule
Voltage:	DC024 DC048 AC115 AC230	24Vdc (20-28Vdc) 48Vdc (42-54Vdc) 115Vac (110-120Vac) 230Vac (220-240Vac)
Cable entries: [e]	A B C D E F G H I J	3 x M20x1.5mm 2 x 1/2" NPT – adaptors 2 x 3/4" NPT – adaptors 2 x M25x1.5mm – adaptors 1 x 1/2" NPT – adaptor 1 x 3/4" NPT – adaptor 1 x M25x1.5mm – adaptor 3 x 1/2" NPT – adaptors 3 x 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 5	A4 316 Stainless Steel A4 316 St/St with Equip. Tag A4 316 St/St with Equip. Tag and Duty Label
Product version: [v]	A	IECEX, ATEX, Ex EAC, PESO, INMETRO – SIL1 & SIL2
Product option: [o]	1 T X	Standard product Tropicalisation Custom configuration – contact E2S
Enclosure colour: [x]	R S	Red Special – contact E2S for alternative enclosure colours
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 2" St/St A4 (316) Sunshade – St/St A4 (316)

## Current Consumption

Nominal Voltage:	Voltage range:	Nominal current:	Max. current:	In-rush:
24Vdc	20-28Vdc	1130mA	1240mA	1508mA <6ms
48Vdc	42-54Vdc	530mA	560mA	2110mA <4ms
115Vac	110-120Vac 50/60Hz	500mA	530mA	-
230Vac	220-240Vac 50/60Hz	195mA	270mA	-



## Assemblies

The GNExB2X21 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.