# GNExB2X10 Xenon Strobe Beacon



The GNExB2X10 is a globally approved explosion proof 10 Joule Xenon beacon. The robust 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 GNExB2X10 beacon produces over 479cd effective - a very high output Xenon strobe flash as required for efficient signalling over greater distances and in high 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 to IEC61508 (2010) as standard, with optional diagnostics for Route 1H SIL2 compliance.

#### 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
- UL Marine approved

#### **Approvals**

• UL/cUL - File ref: E245313

IECEx Certificate: IECEx ULD 15.0003X

ATEX Certificate: DEMKO 15 ATEX 1448X

UKCA certificate: UL21UKEX2136X

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 T4 Gb Ta -50°C to +70°C II 2G Ex db IIC T5 Gb Ta -50°C to +45°C (AC: +40°C) II 2D Ex tb IIIC T117°C Db Ta -50°C to +70°C (AC: T122°C)

NEC Class / Zone

Class I Zone 1 AEx db IIC T4 Ta -50°C to +70°C Class I Zone 1 AEx db IIC T5 Ta -50°C to +45°C (AC: +40°C)

CEC Class / Zone

Ex db IIC T4 Ta -50°C to +70°C

Ex db IIC T5 Ta -50°C to +45°C (AC: +40°C)

• NEC / CEC Class / Div

Class I Div 2 Group ABCD T4 Ta -50°C to +70°C

Class I Div 2 Group ABCD T5 Ta -50°C to +45°C (AC: +40°C)

























# Specification

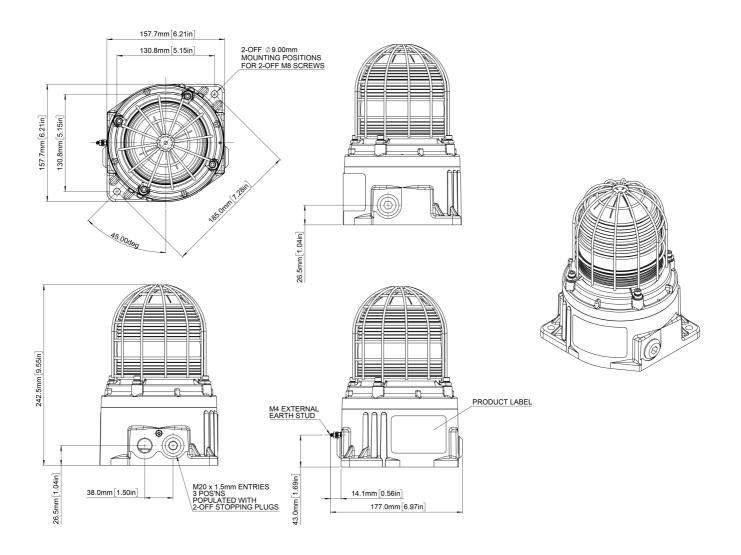
Specification			
Source:	Xenon Strobe		
Energy:	10 Joules (10Ws)		
Flash rates:	1Hz flash (60 fpm) 1.3Hz flash (80 fpm) 1.5Hz flash (90 fpm) Double flash (120 fpm)		
Eff. Intensity cd:	479.39 cd - measured ref to I.E.S		
Peak Candela:	110,243 cd - measured ref to I.E.S		
Eff. Intensity cd:	500 cd - calculated from energy (J)		
Peak Candela:	1,000,000 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:	813mA within 6ms @ 24Vdc		
Safety Integrity Level:	Product version A: SIL1 and SIL2 Route 2H Product version S: SIL2 Route 1H with diagnostics SFF: >99% See install manual for reliability & functional safety data		
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 – 2.5mm² (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		
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted		
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:	99% - tropicalised/conformal coated electronics		
MTBF DC:	198.88 years / 1,742,161 hours - MIL 217		
MTBF AC:	253.68 years / 2,222,223 hours - MIL 217		
Weight:	3.5kg/7.7lbs		
*All candela data i voltage.	s representative of performance with clear lens at optimum		

# Part Codes

Part Code: Product type:	Identifier: Description: GNExB2				
Туре:	X10	Xenon Beacon - 10 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 × 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 - adaptor 3 × 3/4" 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 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	JA S	UL, cUL, IECEx, ATEX, Ex EAC, PESO, INMETRO SIL1 & SIL2 Route 2H UL, cUL, IECEx, ATEX, Ex EAC, PESO, INMETRO (24Vdc only) SIL2 Route 1H with diagnostics SFF: >99% IECEx, ATEX - Telephone/Relay Initiate			
Product option: [o]	•	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	Amber Blue Clear Green Magenta Red Yellow			
Accessories: SP65-0001-A4 SP65-0003-A4		Bracket Kit St/St A4 (316) St/St A4 (316)			

## **Current Consumption**

Nominal Voltage:	Voltage range:	Nominal current:	Max. current:	In-rush:
24Vdc	20-28Vdc	605 m A	710mA	753mA <6ms
48Vdc	42-54Vdc	230mA	250mA	-
115Vac	110-120Vac 50/60Hz	220mA	300mA	-
230Vac	220-240Vac 50/60Hz	130mA	180mA	-



## **Assemblies**

The GNExB2X10 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.