

GNExC1 Xenon Strobe & Alarm Horn Combination

The GNExC1 is a compact combination audio-visual explosion proof 5 Joule Xenon beacon and high output alarm horn sounder warning signal. The robust IP66/67 corrosion proof GRP enclosures ensure suitability for IECEx & ATEX Zone 1 & 2 applications.

The GNExC1 is comprised of the GNExB1X05 beacon producing over 117cd effective – a high output Xenon strobe flash required for safety signalling and either the GNExS1F, GNExS1R or GNExS2F alarm horn sounder. The beacon features a field replaceable colour filter which enhances the strobe and is constructed from UV stable PC. The alarm horn sounder offer sound level outputs of up to 123dB(A) at 1 metre with a choice of 64 alarm tones. The optional GNExS1R alarm horn provides a compact audible solution distributing the warning signal omni-directionally.

Features

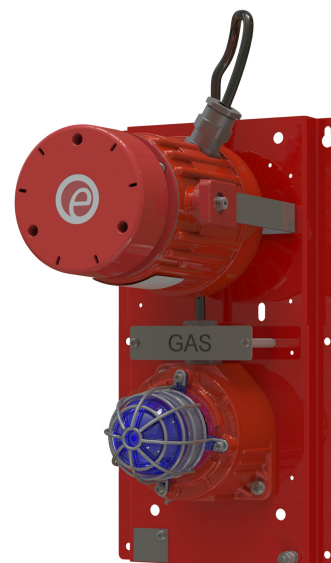
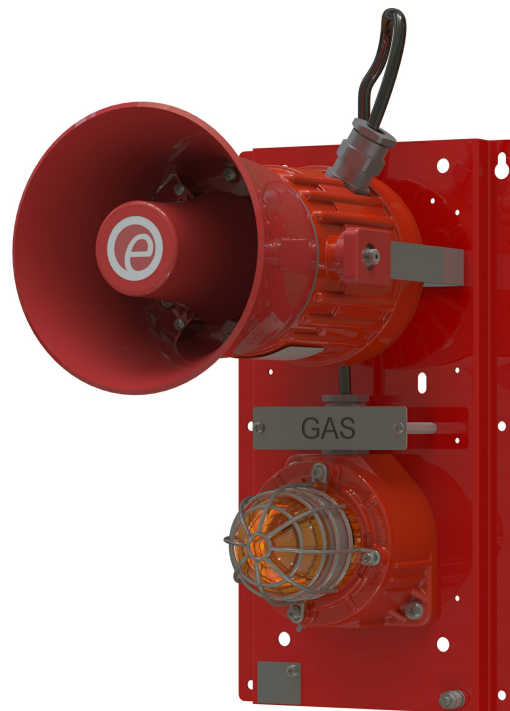
- Robust, corrosion proof GRP (glass reinforced polyester) enclosure
- 316 (A4) stainless steel mounting plate
- Glass lens & Stainless Steel guard
- UV stable PC field replaceable lens colour filter
- Stainless steel fixings
- Ingress protection IP66/67
- Automatic synchronisation of beacon & alarm horn
- User replaceable Xenon tube mechanically secured
- Xenon beacon DC version features a choice of three flash rates
- Alarm horn independent selectable tones for 1st & 2nd stages.
- Alarm horn four remotely switched stages/channels.

Approvals

- IECEx UL 15.0003X, IECEx SIR 13.0029X
- ATEX DEMKO 15ATEX1448X, SIRA 13ATEX1139X
- Ex EAC TR CU 012/2011: KZ.1510019.22.01.00271, RU C-GB.AA71.B.00109
- INMETRO IEx 20.0050X

Coding

| | |
|--------------------|---|
| GNExB1X05 | 5 Joule Xenon beacon component |
| IECEX/ATEX | II 2G Ex db IIC Gb T6 Ta -50°C to +40°C II 2G Ex db IIC Gb T5 Ta -50°C to +55°C II 2G Ex db IIC Gb T4 Ta -50°C to +70°C |
| GNExS1R/S1F | 115/117dB(A) Alarm horn sounder |
| IECEX/ATEX | II 2G Ex d IIC T4 Ta. -60° to +50°C II 2G Ex d IIC T3 Ta. -60° to +70°C II 2G Ex d IIB T6 Ta. -60° to +50°C II 2G Ex d IIB T5 Ta. -60° to +65°C II 2G Ex d IIB T4 Ta. -60° to +70°C |
| GNExS2F | 123dB(A) Alarm horn sounder |
| IECEX/ATEX | II 2G Ex d IIC T4 Ta. -60° to +50°C II 2G Ex d IIC T3 Ta. -60° to +58°C II 2G Ex d IIB T6 Ta. -60° to +50°C II 2G Ex d IIB T5 Ta. -60° to +58°C |



Specification

| | |
|-----------------------------|--|
| Xenon Strobe Beacon: | GNExB1X05 |
| Energy: | 5 Joules (5Ws) |
| Flash rate: | DC voltages: 1Hz (60fpm), 1.5Hz (90fpm) & double flash AC voltages: 1Hz (60fpm) |
| Peak Candela: | 500,000 cd – calculated from energy (J) |
| Eff. Intensity cd: | 250 cd – calculated from energy (J) |
| Peak Candela: | 45,449 cd – measured ref to I.E.S |
| Eff. Intensity cd: | 117.93 cd – measured ref to I.E.S |
| Lens colours: | Amber, Blue, Clear, Green, Magenta, Red & Yellow |
| Tube life: | Emissions are reduced to 70% after 8 million flashes |

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|----------------------------|--|
| Alarm Horn Sounder: | GNExS1F/S1R/S2F |
| Max. SPL GNExS1R: | 115dB(A) @ 1 metre [106dB(A) @ 10ft/3m] |
| Max. SPL GNExS1F: | 117dB(A) @ 1 metre [108dB(A) @ 10ft/3m] |
| Nom. SPL GNExS1F/R: | 110dB(A) @ 1m +/- 3dB [101dB(A) @ 10ft/3m] |
| Max. SPL GNExS2F: | 123dB(A) @ 1 metre [114dB(A) @ 10ft/3m] |
| Nom. SPL GNExS2F: | 117dB(A) @ 1m +/- 3dB [108dB(A) @ 10ft/3m] |
| No. of tones: | 64 (UKOOA / PFEER compliant) |

| | |
|---------------------|--|
| General: | Common component features: |
| Voltages DC: | 24V dc; 48V dc |
| Voltages AC: | 115V ac; 230V ac |
| Line monitoring: | Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted |
| Ingress protection: | IP66/67 |
| Enclosure matl.: | UV stable GRP (glass reinforced polyester) |
| Mounting plate: | 316 (A4) Stainless Steel |
| Colour: | Natural Red – can be provided in alternative colours |
| Cable entries: | 1 x M20 ISO – adaptor to M25, 1/2" or 3/4" NPT can be specified |
| Stopping plugs: | Brass/Nickel Plated/Stainless Steel plugs included |
| Grnd/Earth stud: | M6 |
| Terminals: | 0.5 – 2.5mm ² (20-14 AWG) |
| Enclosure volume: | <2 litres |
| Certified 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 |

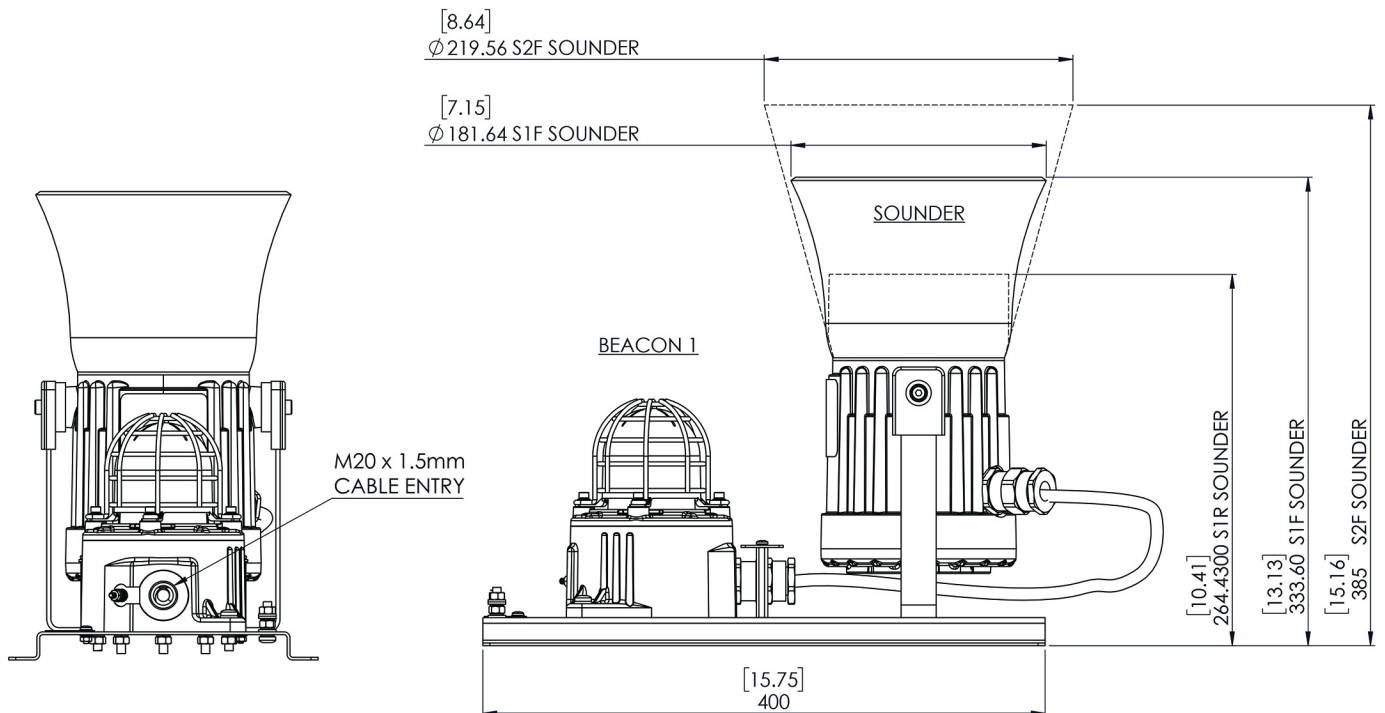
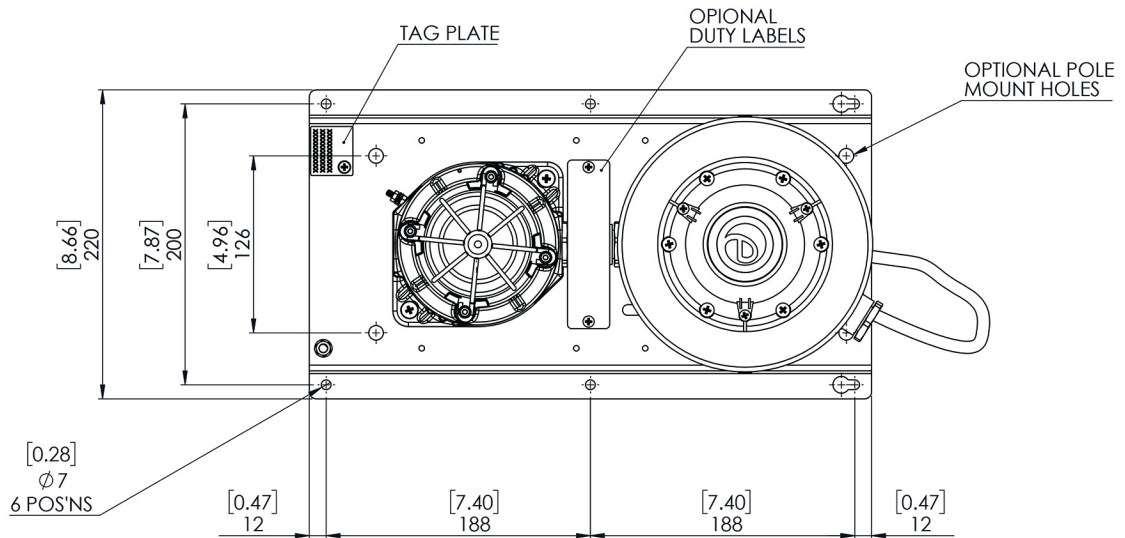
*All candela data is representative of performance with clear lens at optimum voltage.

Part Codes

| Part Code: | Ident.: | Description: |
|-----------------------------|--|--|
| Product type: | GNExC1 | Combined Xenon Strobe Beacon & Alarm Horn Sounder |
| Junction box option: | N2 | 316 Stainless Steel back plate – No junction box option: |
| Xenon Beacon | 1A 1B 1C 1G 1M 1R 1Y | GNExB1X05 5 Joule Strobe – Amber GNExB1X05 5 Joule Strobe – Blue GNExB1X05 5 Joule Strobe – Clear GNExB1X05 5 Joule Strobe – Green GNExB1X05 5 Joule Strobe – Magenta GNExB1X05 5 Joule Strobe – Red GNExB1X05 5 Joule Strobe – Yellow |
| Alarm Horn Sounder: | S1F S1R S2F | GNExS1F alarm horn sounder – 117dB(A) GNExS1R alarm horn sounder – 115dB(A) GNExS2F alarm horn sounder – 123dB(A) |
| Voltage: | AC115 AC230 DC024 DC048 | 115-120V ac 50/60Hz 220-230V ac 50/60Hz 24V dc 48V dc |
| Cable entries: [e] | A E F G | 1 x M20x1.5 1 x 1/2" NPT 1 x 3/4" NPT 1 x M25x1.5 |
| Stopping plug material: [m] | B N S | Brass Nickel Plated Stainless Steel |
| Lens guard matl. & tag: [s] | 1 2 3 4 | A2 304 Stainless Steel with Equip. Tag A4 316 Stainless Steel with Equip. Tag A2 304 St/St with Equip. Tag & Duty Labels A4 316 St/St with Equip. Tag & Duty Labels |
| Version: [v] | A1 T1 W1 Z1 V1 | IECEX & ATEX Tropicalised Special wiring Special software Custom configuration |
| Enclosure: [x] | R S | Red RAL3000 Special |
| Example: | GNExC1 N2 1R S1F DC024 A B 1 A1 R GNExC1 Combined assembly with 1 x GNxB1X05 Xenon Strobe beacon with red lens, GNExS1F Alarm Horn Sounder, 1 x M20x1.5 entry with brass stopping plugs, IECEX & ATEX approved in a red enclosure | |

Current Consumption

| Version: | Voltage Range: | Xenon Beacon GNExB1X05 Current: | Alarm Horn GNEXS1F/S1R Current: | Alarm Horn GNEXS2F Current: |
|-----------------|----------------|---------------------------------|---------------------------------|-----------------------------|
| 24V dc | 20-28V dc | 254mA | 140mA | 81mA |
| 48V dc | 42-54V dc | 158mA | 73mA | 434mA |
| 115V ac 50/60Hz | 110-125V ac | 95mA | 86mA | 297mA |
| 230V ac 50/60Hz | 220-240V ac | 54mA | 75mA | 196mA |



Assemblies

The GNEXC1 combined Xenon Strobe and Alarm Horn Sounder is also available in the Alarm Bar configuration with dual Xenon Strobe beacons. Higher levels of light output are features of the GNEXC2 combined signal and alarm bar, available featuring 10, 15 and 21 Joule Xenon beacons or multi-function high output LED. For applications only requiring visual signals see the GNEXP1 and GNEXP2 alarm bars - featuring combinations of Xenon Strobe and LED beacons.

Tone table

| S 1 | Description | S 2 | S 3 | S 4 | S 1 | Description | S 2 | S 3 | S 4 |
|------|--|-----|------|------|------|---|-----|------|------|
| T 1 | 1000 Continuous - PFEER Toxic Gas | Any | T 2 | T 44 | T 33 | 800 (0.25s on, 1.00s off) Intermittent | Any | T 24 | T 8 |
| T 2 | 1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P. | Any | T 3 | T 44 | T 34 | 800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3... | Any | T 24 | T 8 |
| T 3 | 1000 @ 0.5Hz (1s on, 1s off) Intermittent - P... | Any | T 2 | T 44 | T 35 | 1000 @ 1Hz (0.50s on, 0.50s off) Intermittent | Any | T 24 | T 8 |
| T 4 | 1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48... | Any | T 24 | T 1 | T 36 | 2400 @ 1Hz (0.50s on, 0.50s off) Intermittent | Any | T 24 | T 8 |
| T 5 | 544(100mS)/440 (400mS) - NF S 32-001 | Any | T 19 | T 1 | T 37 | 2900 @ 5Hz (0.10s on, 0.10s off) Intermittent | Any | T 24 | T 8 |
| T 6 | 1500/500 - (0.5s on , 0.5s off) x3 + 1s gap -... | Any | T 44 | T 1 | T 38 | 363/518 @ 1Hz (0.50s / 0.50s) Alternating | Any | T 8 | T 19 |
| T 7 | 500-1500Hz Sweeping 2 sec on 1 sec off - AS4428 | Any | T 44 | T 1 | T 39 | 450/500 @ 2Hz (0.25s / 0.25s) Alternating | Any | T 8 | T 19 |
| T 8 | 500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ... | Any | T 24 | T 35 | T 40 | 554/440 @ 1Hz (0.50s / 0.50s) Alternating | Any | T 24 | T 19 |
| T 9 | 1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM... | Any | T 34 | T 1 | T 41 | 554/440 @ 0.65Hz (0.76s / 0.76s) Alternating | Any | T 8 | T 19 |
| T 10 | 1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM... | Any | T 34 | T 1 | T 42 | 561/760 @ 0.83Hz (0.60s / 0.60s) Alternating | Any | T 8 | T 19 |
| T 11 | 420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ... | Any | T 1 | T 8 | T 43 | 780/600 @ 0.96Hz (0.52s / 0.52s) Alternating | Any | T 8 | T 19 |
| T 12 | 1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201... | Any | T 1 | T 8 | T 44 | 800/1000 @ 2Hz (0.25s / 0.25s) Alternating | Any | T 24 | T 19 |
| T 13 | 422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ... | Any | T 1 | T 8 | T 45 | 970/800 @ 2Hz (0.25s / 0.25s) Alternating | Any | T 8 | T 19 |
| T 14 | 1000/2000 @ 1Hz - Singapore | Any | T 3 | T 35 | T 46 | 800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating | Any | T 24 | T 19 |
| T 15 | 300 Continuous | Any | T 24 | T 35 | T 47 | 2400/2900 @ 2Hz (0.25s / 0.25s) Alternating | Any | T 24 | T 19 |
| T 16 | 440 Continuous | Any | T 24 | T 35 | T 48 | 500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping | Any | T 24 | T 12 |
| T 17 | 470 Continuous | Any | T 24 | T 35 | T 49 | 560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping | Any | T 24 | T 12 |
| T 18 | 500 Continuous - IMO code 2 (Low) | Any | T 24 | T 35 | T 50 | 560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping | Any | T 24 | T 12 |
| T 19 | 554 Continuous | Any | T 24 | T 35 | T 51 | 600/1250 @ 0.125Hz (4s / 4s) Sweeping | Any | T 24 | T 12 |
| T 20 | 660 Continuous | Any | T 24 | T 35 | T 52 | 660/1200 @ 1Hz (0.50s / 0.50s) Sweeping | Any | T 24 | T 12 |
| T 21 | 800 Continuous - IMO code 2 (High) | Any | T 24 | T 35 | T 53 | 800/1000 @ 1Hz (0.50s / 0.50s) Sweeping | Any | T 24 | T 12 |
| T 22 | 1200 Continuous | Any | T 24 | T 35 | T 54 | 800/1000 @ 7Hz (0.07s / 0.07s) Sweeping | Any | T 24 | T 12 |
| T 23 | 2000 Continuous | Any | T 3 | T 35 | T 55 | 800/1000 @ 50Hz (0.01s / 0.01s) Sweeping | Any | T 24 | T 12 |
| T 24 | 2400 Continuous | Any | T 20 | T 35 | T 56 | 2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping | Any | T 24 | T 12 |
| T 25 | 440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent | Any | T 44 | T 8 | T 57 | 2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping | Any | T 24 | T 12 |
| T 26 | 470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent | Any | T 44 | T 8 | T 58 | 2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping | Any | T 24 | T 12 |
| T 27 | 470 @ 5Hz (0.10s on, 0.10s off) Intermittent | Any | T 44 | T 8 | T 59 | 2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping | Any | T 24 | T 12 |
| T 28 | 544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent | Any | T 24 | T 8 | T 60 | 2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping | Any | T 24 | T 12 |
| T 29 | 655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent | Any | T 44 | T 8 | T 61 | 800Hz Motor Siren | Any | T 24 | T 12 |
| T 30 | 660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent | Any | T 24 | T 8 | T 62 | 1200Hz Motor Siren | Any | T 24 | T 12 |
| T 31 | 660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent | Any | T 24 | T 8 | T 63 | 2400Hz Motor Siren | Any | T 24 | T 12 |
| T 32 | 745 @ 1Hz (0.50s on, 0.50s off) Intermittent | Any | T 24 | T 8 | T 64 | Simulated Bell | Any | T 21 | T 12 |