

D1xC3 Xenon/LED & Horn Alarm Bar

The D1xC3 is an audio-visual explosion proof alarm bar with up to 4 Xenon strobe or LED beacons with a high output alarm horn warning signal. Approved to IECEx, ATEX, UL and cUL for Zone 1, 21 and Class I Zone 1 and 21 plus versions suitable for Class I Division 1. The robust marine grade, corrosion proof aluminium enclosures are rated type 4/4X, IP66/67.

The explosion proof D1xC3 alarm bar is comprised of up to 4 x D1xB2X05 5 Joule, D1xB2X10 10 Joule, D1xB2X15 15 Joule, D1xB2X21 21 Joule Xenon strobes or the D1xB2LD2 multi-function LED beacon with either a D1xS1F, D1xS1R, D1xS2F or D1xS2H alarm horn sounder with sound level outputs of up to 128dB(A). Factory assembled and pre-wired with or without a junction box, the signals are mounted on a 316 (A4) stainless steel plate with pole mount kit included.

Features

- Globally approved to UL, cUL, IECEx and ATEX
- Factory assembled cable loom - optional junction box
- Robust, corrosion proof marine grade aluminium enclosures
- 316 (A4) stainless steel mounting plate
- 316 (A4) stainless steel beacon guards
- UV stable PC field replaceable lens colour filter
- Ingress protection 4/4X/13/3R, IP66/67
- Automatic synchronisation
- Multiple wiring configurations available
- SIL1/SIL2 (Route 2H) compliant
- Version SIL2 (Route 1H) compliant with diagnostics
- Telephone/Relay initiate version available

Approvals

- IECEx
- ATEX
- UL
- cUL
- ULC
- UKCA
- CSFM
- SIL1/2

Coding

- NEC/CEC Class/Div:
Class I Div 1 Group ABCD T3B/T3C/T4 Ta -55°C to +80°C (AC: +55°C)
 - NEC Class/Zone:
Class I Zone 1 AEx db IIC T3/T4 Ta -55°C to +80°C (AC: +60°C)
 - CEC Class/Zone:
Ex db IIC T3/T4 Ta -55°C to +80°C (AC: +60°C)
 - IECEx/ATEX:
II 2G Ex db IIC T3/T4/T5 Gb Ta -55°C to +75°C (AC: +65°C)
II 2D Ex tb IIIC T169°C Db Ta -55°C to +75°C (AC: T141°C +60°C)
- Coding dependent upon assembly contents, see component product details



Specification

Beacon Option: D1xB2X05/10/15/21 Xenon Strobe Beacons

Product data:	D1xB2X05: www.e2s.com/1-21-202 D1xB2X10: www.e2s.com/1-21-203 D1xB2X15: www.e2s.com/1-21-204 D1xB2X21: www.e2s.com/1-21-205
Flash rate:	DC: 1Hz (60fpm), 1.5Hz (90fpm) & double flash AC: 1Hz (60fpm)
Eff. Intensity cd:	D1xB2X05: 156.65cd D1xB2X10: 645.21cd D1xB2X15: 731.71cd D1xB2X21: 1250.66cd [Measured ref to I.E.S]
Peak cd:	D1xB2X05: 250cd D1xB2X10: 500cd D1xB2X15: 750cd D1xB2X21: 1050cd [Calculated from energy (J)]

Beacon Option: D1xB2LD2 LED Beacon

Product data:	D1xB2LD2: www.e2s.com/1-21-206
Source:	Array of 4 x High Power Cree® LED's
Modes:	1Hz flash (60 fpm), 1.5Hz (90 fpm), 2Hz (120 fpm) Double strike flash, Triple strike flash High Power Steady, Low Power Steady
Eff. Intensity cd:	174 cd – High Power Steady
Eff. Intensity cd:	338 cd – 1Hz flash

Alarm Horn: D1xS1F/S1R/S2F/S2H Alarm Horn Sounders

Product data:	D1xS1F: www.e2s.com/1-22-140 D1xS1R: www.e2s.com/1-22-145 D1xS2F: www.e2s.com/1-22-150 D1xS2H: www.e2s.com/1-22-155
Max. SPL:	D1xS1F: 115dB(A) @ 1m [106dB(A) @ 10ft] D1xS1R: 110dB(A) @ 1m [101dB(A) @ 10ft] D1xS2F: 123dB(A) @ 1m [114dB(A) @ 10ft] D1xS2H: 128dB(A) @ 1m [119dB(A) @ 10ft]
Nom. SPL +/- 3dB:	D1xS1F: 110dB(A) @ 1m [101dB(A) @ 10ft] D1xS1R: 105dB(A) @ 1m [96dB(A) @ 10ft] D1xS2F: 118dB(A) @ 1m [109dB(A) @ 10ft] D1xS2H: 126dB(A) @ 1m [117dB(A) @ 10ft]
No. of tones:	64 (UKOOA / PFEER compliant)
No. of stages:	4 – Positive or Negative stage switching
Volume control:	Full range

J/Box option: D1xJ2 Ex d Junction Box

Product data:	D1xJ2: www.e2s.com/1-25-025
Terminals:	DIN Rail 12 x AKZ 2.5, Earth 4 x AKE 2.5

General: Common component features:

Voltages:	24Vdc, 115Vac, 230Vac
Ingress protection:	IP rating per EN60529:IP66/67 Type rating per UL50E/NEMA250:4/4X/3R/13
Safety Integrity Level:	Product version A/B/C: SIL1 and SIL2 Route 2H Product version S: SIL2 Route 1H with diagnostics SFF: >99%
Enclosure material:	Marine grade aluminium LM6 – copper free Chromated & powder coated – corrosion proof
Mounting plate:	316 (A4) Stainless Steel
Enclosure colour:	Red or Grey, custom colours available on request
Enclosure finish:	Chromate & powder coated finish
Mounting:	4" Pole mount kit included

Part Codes

Part Code:	Ident.:	Description:
Product type:	D1xC3	Alarm Bar Xenon Strobe or LED Beacons with Alarm Horn Sounder
Junction box option:	N2 J2	No junction box – 316 Stainless Steel back plate With D1xJ2 junction box – 316 Stainless Steel back plate
Beacon Type (Add code for each Beacon required)	1Y 2Y 3Y 4Y 5Y	D1xB2X05 5 Joule Xenon Strobe Beacon D1xB2X10 10 Joule Xenon Strobe Beacon D1xB2X15 15 Joule Xenon Strobe Beacon D1xB2X21 21 Joule Xenon Strobe Beacon D1xB2LD2 LED Beacon
	Y=Colour:	A: Amber B: Blue C: Clear G: Green M: Magenta R: Red Y: Yellow
	Note:	D1xB2X21 only available in first beacon position with J2 Junction Box option
Alarm Horn Sounder:	S1F S1R S2F S2H	D1xS1F alarm horn sounder – 115dB(A) D1xS1R alarm horn sounder – 110dB(A) D1xS2F alarm horn sounder – 123dB(A) D1xS2H alarm horn sounder – 128dB(A)
Voltage:	DC024 AC115 AC230	24Vdc 115-120Vac 50/60Hz 220-230Vac 50/60Hz
Cable entries: [e]	M A B C D E F G	1 x 3/4" NPT + 1 x M20x1.5mm – Default 1 x M20x1.5mm + 1 x M20 – adaptor 2 x 1/2" NPT – adaptors 1 x 3/4" NPT + 1 x 3/4" NPT – adaptor 2 x M25x1.5mm – adaptors 1 x 1/2" NPT – adaptor + 1 x M20x1.5mm 1 x 1/2" NPT – adaptor + 1 x 3/4" NPT 1 x M25x1.5mm – adaptor + 1 x M20
Stopping plug/Adaptor material: [m]	B N S	Brass Nickel Plated Stainless Steel
Guard/Tag material: [s]	1 2 3 4 5	316 St/St Guard & 316 Equipment Tag As (1) with Traffic Light Cowl 316 St/St Guard & 316 Equip. Tag & Duty Labels As (5) with Traffic Light Cowl 316 St/St Guard & 316 Equip. Tag & Duty Labels attached by steel wire
Product version: [v]	A B C S T	IECEX/ATEX/UL/cUL Class I Zone 1 IECEX/ATEX UL/cUL Class I Div 1 SIL2 Route 1H IECEX/ATEX/UL/cUL Class I Zone 1 Relay/Telephone Initiation IECEX/ATEX
	Note:	Product versions S & T only available on single beacon assemblies
Product option: [o]	1 2 3 4 5 6 W X	Standard Wiring (Positive stage switching) Independent Wiring (Positive stage switching) Alt. Standard Wiring (Negative stage switching) Independent Wiring (Negative stage switching) Beacons & Sounder Linked w/ Line Monitoring Independent Wiring w/ Line Monitoring Special Wiring Custom Configuration
	Note:	Options are product specific, please review wiring drawings
Enclosure colour: [x]	R G	Red Grey
Example:	D1xC3 J2 5G 2A 2R S1F DC024 A B 1 A 1 R	D1xC3 Alarm bar assembly with D1xJ2 Junction Box, 1 x D1xB2LD2 LED beacon with green lens, 1 x D1xB2X10 10J Xenon beacon with Amber lens, 1 x D1xB2X10 10J Xenon beacon with red lens, D1xS1F Alarm Horn Sounder, 2 x M20x1.5 entry with brass stopping plugs, IECEX, ATEX, UL/cUL Class I Zone 1 approved with red enclosure

Tone table

S 1	Description	S 2	S 3	S 4
T 1	1000 Continuous - PFEER Toxic Gas	Any	T 2	T 44
T 2	1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P.	Any	T 3	T 44
T 3	1000 @ 0.5Hz (1s on, 1s off) Intermittent - P...	Any	T 2	T 44
T 4	1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48...	Any	T 24	T 1
T 5	544(100mS)/440 (400mS) - NF S 32-001	Any	T 19	T 1
T 6	1500/500 - (0.5s on , 0.5s off) x3 + 1s gap - ...	Any	T 44	T 1
T 7	500-1500Hz Sweeping 2 sec on 1 sec off - AS4428	Any	T 44	T 1
T 8	500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ...	Any	T 24	T 35
T 9	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1
T 10	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1
T 11	420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ...	Any	T 1	T 8
T 12	1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201...	Any	T 1	T 8
T 13	422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ...	Any	T 1	T 8
T 14	1000/2000 @ 1Hz - Singapore	Any	T 3	T 35
T 15	300 Continuous	Any	T 24	T 35
T 16	440 Continuous	Any	T 24	T 35
T 17	470 Continuous	Any	T 24	T 35
T 18	500 Continuous - IMO code 2 (Low)	Any	T 24	T 35
T 19	554 Continuous	Any	T 24	T 35
T 20	660 Continuous	Any	T 24	T 35
T 21	800 Continuous - IMO code 2 (High)	Any	T 24	T 35
T 22	1200 Continuous	Any	T 24	T 35
T 23	2000 Continuous	Any	T 3	T 35
T 24	2400 Continuous	Any	T 20	T 35
T 25	440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent	Any	T 44	T 8
T 26	470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent	Any	T 44	T 8
T 27	470 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 44	T 8
T 28	544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent	Any	T 24	T 8
T 29	655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent	Any	T 44	T 8
T 30	660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent	Any	T 24	T 8
T 31	660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent	Any	T 24	T 8
T 32	745 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8

S 1	Description	S 2	S 3	S 4
T 33	800 (0.25s on, 1.00s off) Intermittent	Any	T 24	T 8
T 34	800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3...	Any	T 24	T 8
T 35	1000 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 36	2400 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 37	2900 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 24	T 8
T 38	363/518 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 8	T 19
T 39	450/500 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 40	554/440 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 24	T 19
T 41	554/440 @ 0.65Hz (0.76s / 0.76s) Alternating	Any	T 8	T 19
T 42	561/760 @ 0.83Hz (0.60s / 0.60s) Alternating	Any	T 8	T 19
T 43	780/600 @ 0.96Hz (0.52s / 0.52s) Alternating	Any	T 8	T 19
T 44	800/1000 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 45	970/800 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 46	800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating	Any	T 24	T 19
T 47	2400/2900 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 48	500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping	Any	T 24	T 12
T 49	560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping	Any	T 24	T 12
T 50	560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping	Any	T 24	T 12
T 51	600/1250 @ 0.125Hz (4s / 4s) Sweeping	Any	T 24	T 12
T 52	660/1200 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 53	800/1000 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 54	800/1000 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 55	800/1000 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 56	2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 57	2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 58	2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 59	2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping	Any	T 24	T 12
T 60	2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping	Any	T 24	T 12
T 61	800Hz Motor Siren	Any	T 24	T 12
T 62	1200Hz Motor Siren	Any	T 24	T 12
T 63	2400Hz Motor Siren	Any	T 24	T 12
T 64	Simulated Bell	Any	T 21	T 12