STA3 Alarm with Xenon/LED Beacon Stack/Tower

The STA3 is a customisable audio-visual signal featuring a tower of 3 AlertAlight L101 type beacons combined with a SONF1 alarm sounder.

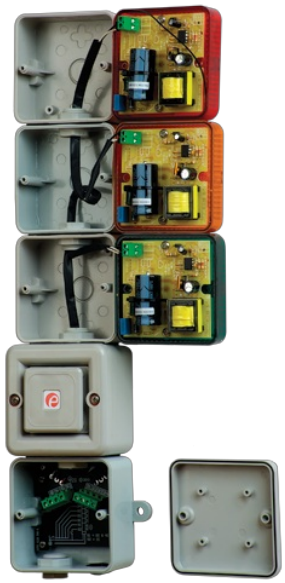
Each beacon position can contain either a Xenon or high output L.E.D. light source. The STA3 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.

Features

- SONF1 alarm sounder synchronises automatically on multi-unit systems.
- Multiple configurations of Xenon and L.E.D. beacons.
- Internal cable loom and termination PCB simplifies installation.
- Common negative/neutral supply minimises cabling.
- High output L.E.D. unit can be set to steady or flashing.
- Available with red, white or grey housing.
- Sealed to IP66.
- Tropicalisation available on request.
- Also available without SONF1 audible signal – see the STB2/3/4 products

Approvals

- UL & cULs approved
- EAC compliant



Specification

STA:

Assembly:	Enclosure & cable loom
Cable entries:	2 x M20 clearance
Cable loom:	Pre-wired with termination PCBA
Terminals:	0.5 to 4.0mm² cables
Ingress Protection:	IP66
Enclosure material:	UL94V0 & 5VA FR ABS/PC
Enclosure colour:	RAL3000 Red, RAL7038 Grey and White
Lens material:	PC
Fixings:	Stainless Steel
Operating temp:	-40° to +70°C [-40° to +158°F]
Storage temp:	-40° to +70°C [-40° to +158°F]
Relative humidity:	95% at 20°C [68°f]
STA2 Weight:	0.95kg/2.09lbs
STA3 Weight:	1.15kg/2.53lbs
STA4 Weight:	1.35kg/2.97lbs

Alarm Sounder:

Type:	SONF1 alarm horn sounder
Maximum output:	100dB(A) @ 1 metre [91dB(A) @ 10ft/3m]
Nominal output:	99dB(A) @ 1m +/- 3dB – Tone 1 [90dB(A) @ 10ft/3m]
No. of tones:	10 (UKOOA / PFEER compliant)
No. of stages:	2 (AC voltage variants 1 stage)
Volume control:	On board potentiometer
Effective range:	30m/99ft @ 1KHz
Monitoring:	Reverse polarity diode protection on DC units.

Xenon Beacon:

Type:	L101X Xenon Strobe Beacon
Energy:	5 Joules (5Ws)
Flash rate:	1Hz (60 fpm)
Peak Candela:	500,000 cd – calculated from energy (J)
Effective Intensity cd:	250 cd – calculated from energy (J)
Peak Candela:	86,935 cd* – measured ref. to I.E.S.
Effective Intensity cd:	200 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

L.E.D Beacon:

Type:	L101H multi-function LED
Light source:	High intensity 18 x Cree© SMT White L.E.D. array
Function:	High Power Steady Blinking – 425ms ON 75ms OFF 1.0Hz (60 fpm) – 200ms ON 800ms OFF 1.33Hz (80fpm) – 150ms ON 600ms OFF Double Flash Triple Flash 2.0Hz (120fpm) – 125ms ON 375ms OFF Temporal Flash
Peak/Effective Intensity cd:	180cd – measured ref. to I.E.S.
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red, Yellow

Part Codes

Stack assembly:

Part Code:	Ident.:	Description:
Product type:	STA3	Alarm Horn with 2 x Beacons Signal Stack / Tower
Voltage:	AC230 AC115 DC024	230V ac 50/60Hz 115V ac 50/60Hz 12/24V dc
Cable entries: [e]	A	2 × 20mm clearance
Stopping plug material: [m]	A	ABS
Option: [s]	0	Standard configuration
Version: [v]	A1	UL, cULs
Enclosure: [x]	G R W	Grey RAL7038 Red RAL3000 White

Beacon components:

Part Code:	Ident.:	Description:
Product type:	ST-L101X	L101X Xenon Beacon 5J
Voltage:	AC230 AC115 DC024 DC012	230Vac +/-10% 50/60Hz 115Vac +/-10% 50/60Hz 24Vdc – 20-28Vdc 12Vdc – 10-14Vdc
Version: [v]	A1	UL, cULs
Lens colour: [y]	A B C G M R Y	Amber Blue Clear Green Magenta Red Yellow

Part Code:	Ident.:	Description:
Product type:	ST-L101H	L101H LED Beacon
Voltage:	AC230 DC024 DC012	115/230Vac 50/60Hz 16-33Vdc 10-14Vdc
Version: [v]	A1	UL, cULs
Lens colour: [y]	A B C G M R Y	Amber Blue Clear Green Magenta Red Yellow

Example: For an alarm horn tower with three beacons featuring two Xenon beacons, one red, one amber plus one L.E.D. beacon in green for a 24Vdc supply in a red housing, order the following part codes:
STA3DC024AA0A1R
ST-L101XDC024A1R
ST-L101XDC024A1A
ST-L101HDC024A1G

Current Consumption

SONF1 Alarm Horn Sounder

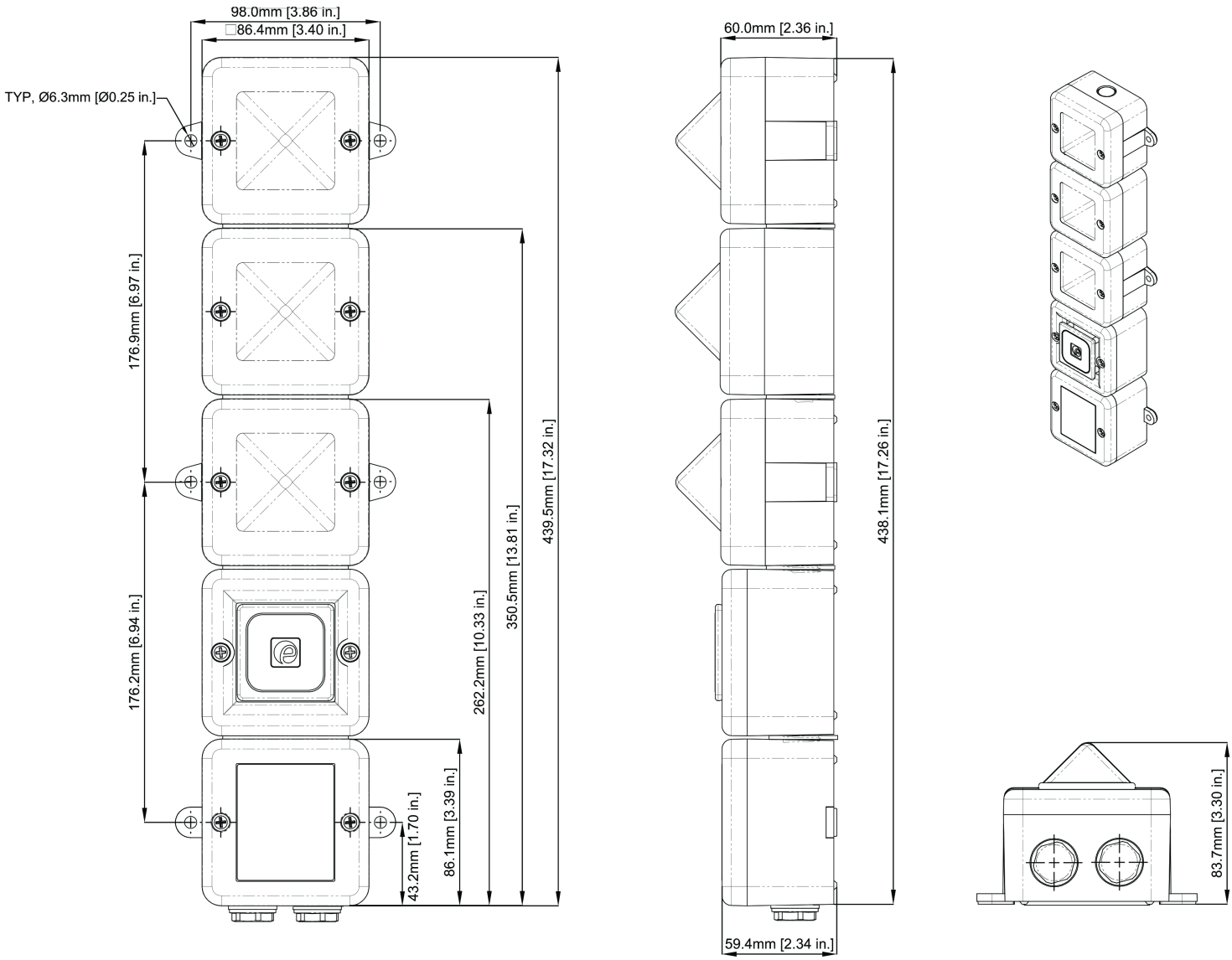
Range:	Version:	Current:
10-30V	DC024	12mA
115Vac +/-10%	AC115	27mA
230Vac +/-10%	AC230	39mA

L101X Xenon Strobe

Range:	Version:	Current:	Max Current:
10-14Vdc	DC012	500mA	531mA @ 14Vdc
20-28Vdc	DC024	250mA	271mA@ 20Vdc
115Vac +/-10%	AC115	70mA	101mA @ 126.5Vac
230Vac +/-10%	AC230	35mA	58mA @ 253Vac

L101H LED Beacon

Range:	Version:	Current Steady Mode:	Current 1Hz Flash:	Current 1.5Hz Flash:	Current 2Hz Flash:	Max Current:
10-14Vdc	DC012	167.5mA	79.5mA	84mA	87mA	168mA @ 14Vdc
16-33Vdc	DC024	178.5mA	86.5mA	91mA	96mA	183mA @ 24Vdc
48-260Vac	AC230	85.5mA @ 115Vac 53mA @ 230Vac	34mA @ 115Vac 18.5mA @ 230Vac	37.5mA @ 115Vac 19.5mA @ 230Vac	40mA @ 115Vac 23.5mA @ 230Vac	166mA @ 48Vac 51mA @ 260Vac



Tone table

S 1	Description	S 2
T 1	800/1000Hz @ 0.25 sec Alternating	T 8
T 2	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	T 1
T 3	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	T 8
T 4	544Hz (100mS)/440Hz (400mS) - NF S 32-001	T 9
T 5	Bell	T 1
T 6	800/1000Hz @ 7Hz Sweeping	T 8
T 7	500-1200Hz 3.75sec /0.25sec. Australian Evac.	T 10
T 8	1000Hz Continuous - PFEER Toxic Gas	
T 9	Continuous 554Hz	
T 10	420Hz @ 0.625 sec Australian Alert	
	Following tones applicable for AC voltage ver...	
Stage 1	Frequency Description	
T 1	800/1000Hz @ 0.25 sec Alternating	
T 2	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	
T 3	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	
T 4	544Hz (100mS)/440Hz (400mS) - NF S 32-001	
T 5	1000Hz Continuous - PFEER Toxic Gas	
T 6	Bell	
T 7	800/1000Hz @ 7Hz Sweeping	
T 8	2400/2900Hz @ 50Hz Sweeping	
T 9	420Hz @ 0.625 sec Australian Alert	
T 10	500-1200Hz 3.75sec /0.25sec. Australian Evac.	

No liability is accepted for any consequence of the use of this document. The technical specification of this unit is subject to change without notice due to our policy of continual product development. All dimensions are approximate. This unit is sold subject to our standard conditions of sale, a copy of which is available on request.