

STA4 Alarm with Xenon/LED Beacon Stack/Tower

The STA4 is a customisable audio-visual signal featuring a tower of 4 AlertAlight L101 type beacons combined with a SONF1 alarm sounder.

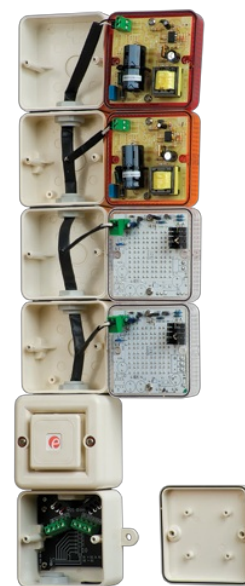
Each beacon position can contain either a Xenon or high output L.E.D. light source. The STA4 assembly features a pre-wired junction box and cable loom enabling the end user to determine beacon type and position during installation.

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/cUL – File ref: E216937
- CSFM listing: 7300-2279:0512
- EAC CU TR 043/2017: B.00291/21
- EAC: RU D-GB.GA05.B.12595-20
- CE, UKCA



Specification

STA:

Assembly:	Enclosure & cable loom
Cable entries:	2 x M20 clearance
Cable loom:	Pre-wired with termination PCBA
Terminals:	0.5 to 4.0mm ² cables
Ingress Protection:	IP66 Type 13/3R
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 (UK00A / PFEER compliant)
No. of stages:	2 (AC voltage variants 1 stage)
Volume control:	On board potentiometer
Effective range:	30m @ 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:	STA4	Alarm Horn with 4 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
Product version: [v]A		UL, cULs
Product option: [o]	1 X Z	Standard product Custom configuration - contact E2S Custom alarm tone software - contact E2S
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
Product version: [v]A		UL, cULs
Product option: [o]	1	Standard product
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
Product version: [v]A		UL, cULs
Product option: [o]	1	Standard product
Lens colour: [y]	A B C G M R Y	Amber Blue Clear Green Magenta Red Yellow

Example: For an alarm horn tower with four beacons featuring three Xenon beacons, one red, one amber, one blue plus one L.E.D. beacon in green for a 24Vdc supply in a red housing, order the following part codes:

STA4DC024AA0A1R
ST-L101XDC024A1R
ST-L101XDC024A1A
ST-L101XDC024A1B
ST-L101HDC024A1G

Current Consumption

SONF1 Alarm Horn Sounder

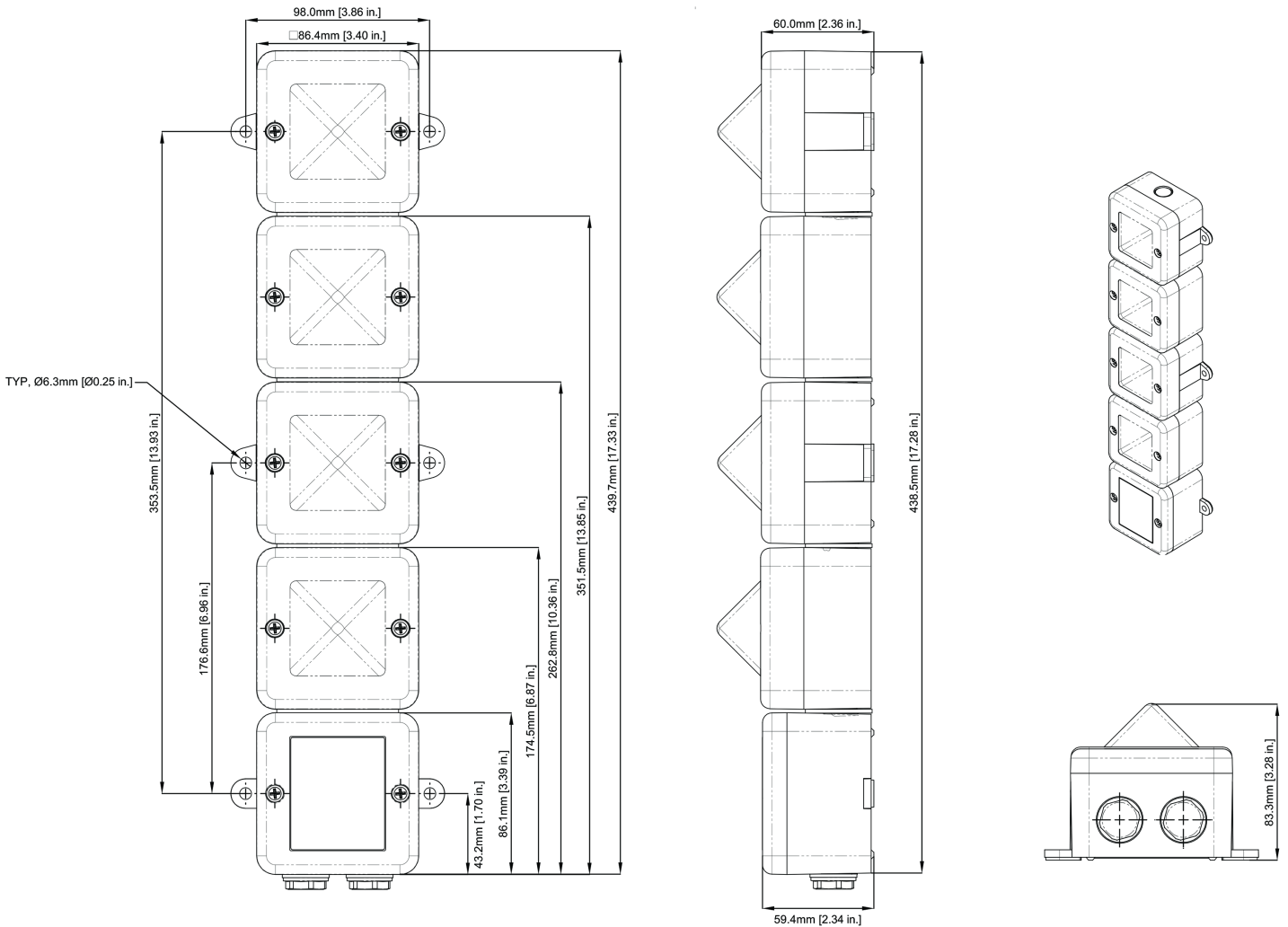
Range:	Version:	Current:
10-30V	DC024	12mA
115Vac +/-10%	AC115	27mA
230Vac +/-10%	AC230	39mA

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 Frequency Description

1

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.