

STExS1F Alarm Horn Sounder

The STExS1F is a UL, cUL, IECEx and ATEX certified alarm horn sounder featuring a re-entrant flare horn. The robust 316L stainless steel enclosure is approved for Zone 1, 2, 21 & 22 explosion proof signalling applications.

Featuring 64 alarm tone sounds, each of the available 4 stage/channels can be remotely triggered. Class D amplification provides a high sound output at optimum operating current. The threaded flameproof joint, multiple cable entries and duplicated, pluggable termination simplifies both installation and routine maintenance. SIL1 compliant to IEC61508 (2010) as standard. DNV type approved for exposed locations.

Features

- Maximum sound pressure level output of 115dB(A)
- Choice of 64 alarm tone frequencies
- 4 remotely selectable alarm stages/channels
- Positive or negative line stage/channel switching
- Automatic synchronisation on multi-sounder system
- Ratchet adjustable 316 stainless steel bracket
- Triple cable entries
- Available with custom tone configurations and frequencies
- Robust corrosion proof 316L stainless steel enclosure
- DNV type approved IEC 60945 & DNVGL-CG-0339

Approvals

- UL/cUL - File ref: E230764
- IECEx ULD 16.0017X
- ATEX DEMKO 16 ATEX 1466X
- UKCA certificate: UL21UKEX2019X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252_21
- INMETRO IEx 20.0156X
- DNV type approved: TAA00001JN
- SIL1 compliant to IEC 61508 (2010)

Coding

- NEC / Class / Zone
Class I Zone 1 AEx db IIC T5 Ta -50°C to +70°C
Class I Zone 1 AEx db IIC T6 Ta -50°C to +65°C
- CEC / Class / Zone
Class I Zone 1 Ex db IIC T5 Ta -50°C to +70°C
Class I Zone 1 Ex db IIC T6 Ta -50°C to +65°C
- NEC / CEC Class / Div
Class I Div 2 ABCD T5 Ta -50°C to +70°C
Class I Div 2 ABCD T6 Ta -50°C to +65°C
- IECEx / ATEX
II 2G Ex db IIC Gb T5 Ta -50°C to +70°C
II 2G Ex db IIC Gb T6 Ta -50°C to +65°C
II 2D Ex tb IIIC Db T85°C Ta -50°C to +70°C



Specification

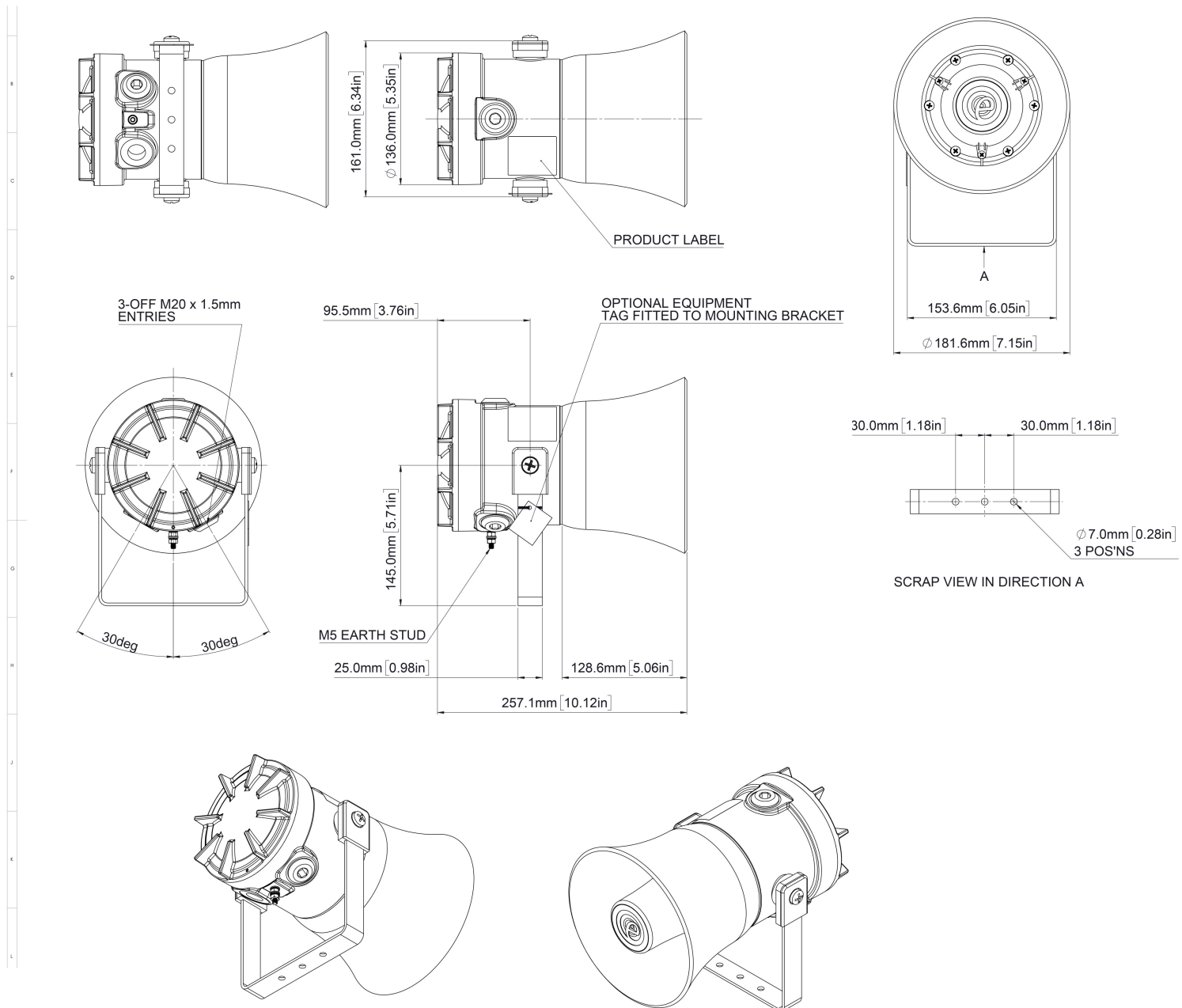
Maximum output:	115dB(A) @ 1 m +/- 3dB [106dB(A) @ 10ft/3m +/- 3dB]
Nominal output:	110dB(A) @ 1m +/- 3dB [101dB(A) @ 10ft/3m] +/- 3dB
No. of tones:	64 (UK00A / PFEER compliant)
No. of stages:	4
Volume control:	Full range
Effective range:	125m/410ft @ 1KHz
Voltages DC:	24V dc (11.5-54V dc)
Voltages AC:	230vac (100-240vac)
In-rush:	815mA within 4ms @ 24Vdc
Stage switching:	DC units: positive or negative AC units: common supply line
Ingress protection:	EN60529: IP66
Enclosure material:	316L Stainless Steel
Enclosure colour:	Red (RAL3000)
Enclosure finish:	Chromate & powder coated finish
Cable entries:	3 x M20x1.5mm Stopping plugs included
Stopping plugs:	Stainless Steel
Terminals:	0.5 - 2.5mm ² (20-14 AWG) Pluggable & duplicated terminals
Line monitoring:	Diode polarized for use in supervised circuits Blocking diode for reverse polarity monitoring
Ground/Earth stud:	M5
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%
MTBF DC:	93.92 years / 822,706 hours - MIL 217
MTBF AC:	46.66 years / 408,508 hours - MIL 217
Weight:	6.25kg/13.75lbs

Part Codes

Part Code:	Identifier:	Description:
Product type:	STExS1	STExS1 alarm horn sounder
Horn type:	F	Flare re-entrant horn
Voltage:	DC024 AC230	11.5-54Vdc 100-240Vac
Cable entries:[e]	A B C D E F G	3 x M20x1.5mm 2 x 1/2" NPT - adaptors 2 x 3/4" NPT - adaptors 2 x M25x1.5mm - adaptors 1 x 1/2" NPT - adaptor 1 x 3/4" NPT - adaptor 1 x M25x1.5mm - adaptor
Stopping plug/ adaptor material: [m]	S	Stainless steel
Bracket material: [s]	1 3	A4 316 Stainless Steel A4 316 St/St with Equip. Tag
Product version: [v]	A M S	UL, cUL, IECEx, ATEX, Ex EAC, INMETRO IECEX, ATEX, Ex EAC, INMETRO, DNV SIL2 Monitoring Module UL, cUL, IECEx, ATEX, Ex EAC, INMETRO
Product option: [o]	1 Z X Y K V	Standard product Custom alarm tone software - contact E2S Custom configuration - contact E2S Stage control Config. 4 Stage control Config. 5 (DC) and Config. 2 (AC) Stage control Config. 6
Enclosure colour: [x]	R S	Red Special - contact E2S for alternative enclosure colours
Accessories:		
SP65-0001-A4		Pole Mount Bracket Kit 2" St/St A4 (316)
SP65-0003-A4		Sunshade - St/St A4 (316)

Current Consumption

Nominal Voltage:	Voltage range:	Nominal current:	Max. current:	In-rush:
12Vdc	11.5-54Vdc	221mA	221mA	-
24Vdc	11.5-54Vdc	185mA	221mA	815mA <4ms
48Vdc	11.5-54Vdc	115mA	221mA	-
115Vac 50/60Hz	100-260V ac	73mA	80mA	-
230Vac 50/60Hz	100-260V ac	48mA	80mA	-



Assemblies

The STExS1F is available as a plated assembly configured with Xenon strobe or LED beacons with or without a STExJ2 Ex d junction box. Contact E2S for further information.

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