

# STExS1R Alarm Horn Sounder

The STExS1R is a high output, 115dB(A) alarm horn sounder with a omnidirectional horn. Low current consumption and high SPL in a robust IP66 corrosion proof 316L stainless steel enclosure ensures suitability for all Zone 1, 2, 21 & 22 applications.

Featuring 64 first stage/channel alarm sounds which can be selected via an internal switch. The alarm tone frequencies for the first 2 stages are independently selectable. Each tone can be remotely triggered e.g. via an external relay, to change to a second, third or fourth stage/channel alarm sound.

The enclosure features a threaded flame path, triple cable entries and a large termination area – all of which significantly reduce installation time. SIL1 compliant to IEC 61508 (2010). DNV type approved for exposed locations

## Features

- Robust corrosion proof 316L stainless steel enclosure
- High output, up to 115dB(A)
- 4 remotely selectable alarm stages/channels
- Positive or negative line stage/channel switching
- Choice of 64 alarm tone frequencies
- Automatic synchronisation on multi-sounder system
- Continuously rated
- Compact form factor
- Stainless steel fixings
- Ratchet adjustable 316 stainless steel bracket
- 316 Stainless steel stopping plugs included
- 3 x cable entries
- Duplicate cable terminations (in & out for daisy-chain installations)
- Available with custom tone configurations and frequencies
- DNV type approved IEC 60945 & DNVGL-CG-0339

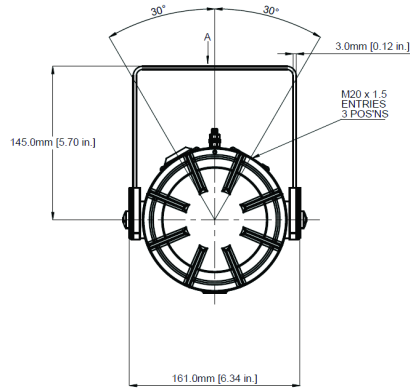
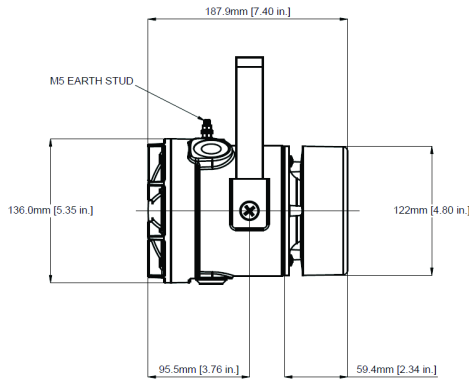
## Approvals

- IECEx ULD 16.0017X  
IEC 60079-0 : 2011  
IEC 60079-1 : 2014  
IEC 60079-31 : 2013
- ATEX DEMKO 16 ATEX 1466X  
EN 60079-0 : 2012 + A11 : 2013  
EN 60079-1 : 2014  
EN 60079-31 : 2014
- TR-CU Ex EAC certificate: RU C-GB.AA71.B.00109
- SIL1 compliant to IEC 61508 (2010)

## Coding

- Ex db IIC Gb T6 Ta -50°C to +65°C
- Ex db IIC Gb T5 Ta -50°C to +70°C
- Ex tb IIIC Db T85°C Ta -50°C to +70°C





## Specification

Maximum output:	115dB(A) @ 1 metre [107dB(A) @ 10ft/3m]
Nominal output:	110dB(A) @ 1m +/- 3dB - Tone 2 [103dB(A) @ 10ft/3m]
No. of tones:	64 (UK00A / PFEER compliant)
No. of stages:	4
Volume control:	Adjustable -12dB(A) [Tone 2]
Effective range:	125m/410ft @ 1KHz
Voltages DC:	24V dc (10-30V dc)
Voltages AC:	110-240V ac 50/60Hz
Stage switching:	DC units: negative or positive AC units: common supply line
Ingress protection:	EN60529: IP66
Enclosure matl:	316L Stainless Steel
Enclosure finish:	Chromated & powder coated
Colour:	RAL3000 Red
Cable entries:	3 x M20 ISO (2 x stopping plugs included as standard) Adaptors to M25, 1/2" & 3/4" NPT can be specified
Terminals:	0.5 - 2.5mm <sup>2</sup> (20-14 AWG)
Enclosure volume:	<2 litres
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted
Grounding stud:	M5
Temperature range:	-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
Weight:	6.00kg/13.22lbs

## Part Codes

Version:	Part code: _____	
Product type:	STExS1	
Horn type:	R	Radial horn
Voltage:	DC024	10-30V dc
	AC230	110-240V ac
Cable Entry Type: [e]	A	3 x M20x1.5mm
	B	2 x 1/2" NPT - adaptors
	C	2 x 3/4" NPT - adaptors
	D	2 x M25x1.5mm - adaptors
	E	1 x 1/2" NPT - adaptor
	F	1 x 3/4" NPT - adaptor
	G	1 x M25x1.5mm - adaptor
Adaptor/Stopping plug material: [m]	B	Brass
	N	Nickel Plated
	S	Stainless Steel (standard)
Bracket matl & tag: [s]	1	A2 304 Stainless Steel
	2	A4 316 Stainless Steel (default)
	3	A2 304 St/St with Equip. Tag
	4	A4 316 St/St with Equip. Tag (304)
Product version: [v]	A1	IECEx & ATEX Group II 2G/D Zone 1, 2, 21 & 22
	M1	IECEx & ATEX Group II 2G/D Zone 1, 2, 21 & 22 - DNV type approved
Enclosure colour: [x]	R	Red RAL3000
Accessories:	SP65-0001-Pole Mount Bracket Kit 2" St/St A2 (304)	
	A2	Pole Mount Bracket Kit 2" St/St A4 (316)
	SP65-0001-Sunshade - St/St A2 (304)	
	A4	Sunshade - St/St A4 (316)
	SP65-0003-A2	
	SP65-0003-A4	

## Alarm Sounder

Version:	Voltage:		Current:
10-30V dc	24V dc		217mA
110-240V ac	50/60Hz	115V ac	77mA
110-240V ac	50/60Hz	230V ac	53mA

## 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