

## Electronic Sirens

Modern, powerful and technologically superior. Alert entire cities in seconds and communicate important information to their inhabitants via voice announcements. Numerous upgrades improve the capability of our sirens. Many different construction varieties guarantee an optimal acoustic radiation. Perfect quality and excellent know-how make our electronic siren to the best in its class.

Avionic Service





## Site independency

Place your siren wherever you want, its independent from the power supply network.

## Economical

Reduce your running costs due to lower power consumption.

## Low maintenance

Save maintenance time and costs. The siren has no moving parts.

## Variable performance

Get the optimal acoustic radiation due to different power levels.

## Flexible alerting

Many ways to alert, e.g. live, from voice memory or by siren signals.

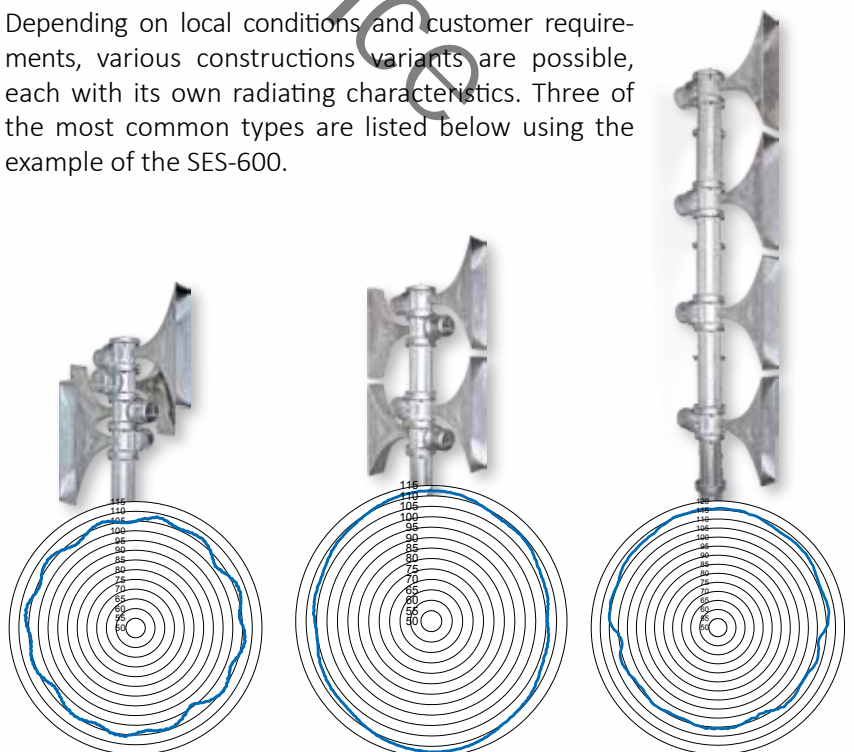
## Made in Germany

### ELEKTRONIC SIREN FEATURES

- Modular systems
- Variable siren signals with DSP (digital signal processing)
- Extrem high efficiency dB/A
- Power control of the siren signal
- Adjustment to changes in battery voltage and and speaker impedance
- Battery charging via solar cell possible
- Short-circuit proof
- Temperature monitoring
- Silent test of the speaker systems
- Automatic system test
- Status indicator
- Microprocessor-controlled function monitoring of the system
- Service software for diagnosis at site
- Two batteries
- Power output level from 300-600 W True RMS per amplifier
- Seewater resistant aluminium

### ACOUSTIC RADIATION AND CONSTRUCTION

Depending on local conditions and customer requirements, various constructions variants are possible, each with its own radiating characteristics. Three of the most common types are listed below using the example of the SES-600.



SES-600-360, 107 dB(A)

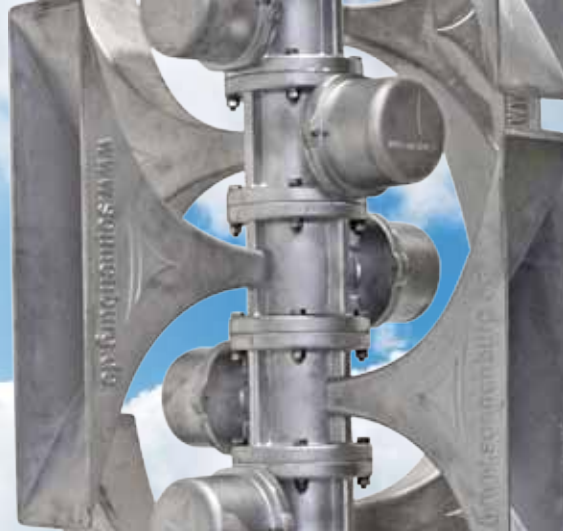
SES-600-180, 109 dB(A)

SES-600-0, 117 dB(A)



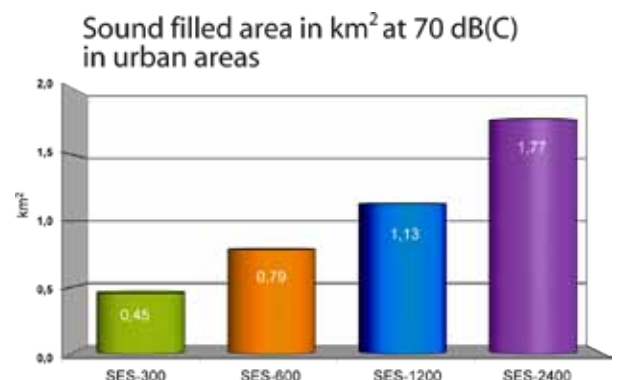
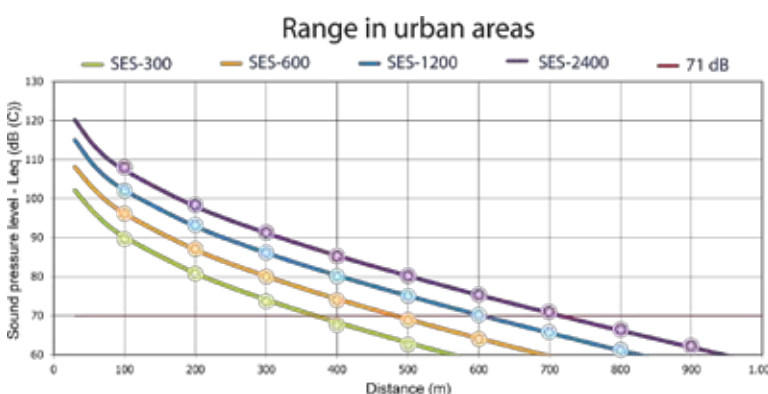
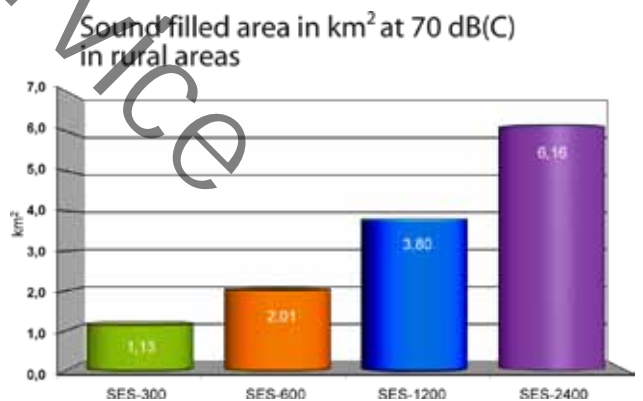
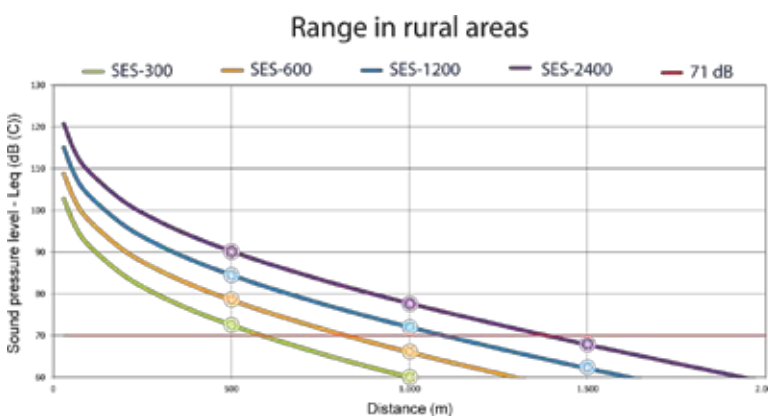
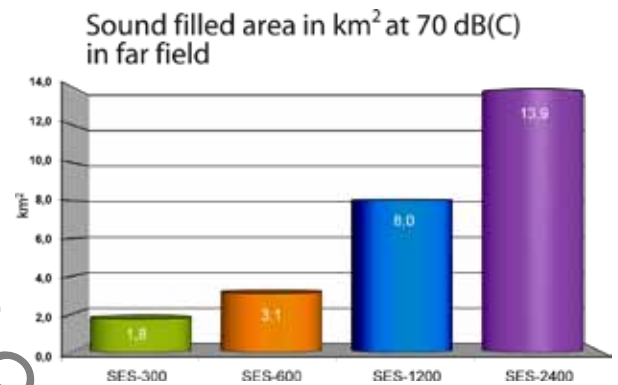
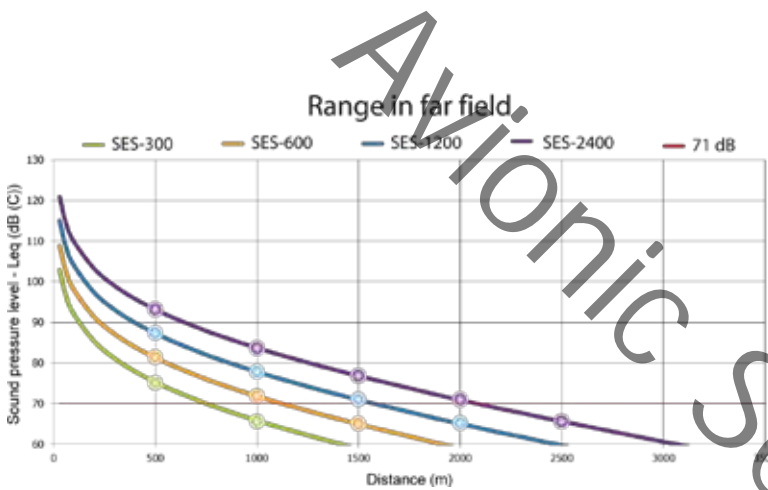
ISO 14001:2009  
**QZV**  
 Zertifikat Nr. 15511180  
 ISO 9001:2008  
**QZV**  
 Zertifikat Nr. 15161182

# AIMING HIGH FOR YOUR SAFETY



## RANGES

The geography can be roughly divided into three stages: urban, rural and far field. Due to the obstruction by buildings, forests or mountains, the sound pressure in these areas is different to some degrees. Based on the chart below you can compare the levels of individual siren types and their ranges.





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## TECHNICAL DETAILS ACOUSTIC RADIATOR

	SES-300-series	SES-600-series	SES-1200-series	SES-2400-series
Sound pressure level in dB(A) in 30 m distance	111 dB(A) at 0° 103 dB(A) at 180°	117 dB(A) at 0° 109 dB(A) at 180°	122 dB(A) at 0°-2L 115 dB(A) at 180°	128 dB(A) at 0°-2L 117 dB(A) at 180°
Basic frequency	415 Hz			
Number of acoustic radiators	2	4	8	16
Humidity	0 %- 100 %			
Acoustic radiators made of	Material AlSi7Mg0,35F- seawater resistant aluminium alloy			
Temperature range	-50° C to +70° C			
Screw set	V2A			
dimensions (w x h x d) in mm	0°: 610 x 1250 x 180 180°: 800 x 770 x 180	0°: 610 x 2530 x 180 180°: 800 x 1410 x 180 360°: 800 x 1090 x 800	0°-2L: 610 x 2690 x 300 180°: 800 x 2690 x 180 360°: 800 x 1730 x 800	0°-2L: 610 x 5250 x 300 180°: 800 x 5250 x 180 360°: 800 x 3010 x 800

## TECHNICAL DETAILS ELECTRONIC

	SES-300-series	SES-600-series	SES-1200-series	SES-2400-series
Number of amplifiers	2	2	2	4
Power output RMS	300 W	600 W	1200 W	2400 W
Mains voltage	230 V <sub>AC</sub>			
Power input in stand-by mode	3,5 V A			
Power input at battery charge	93 W			
Number of potential free inputs	3			
Number of potential free outputs	optional 2 potential free outputs for summing fault and alert active max. 24 V / 100 mA			
Status identification via service interface	all status identifications can be displayed at a service interface via a service program			
Battery voltage /-capacity (C20)	24 V / 26 Ah	24 V / 40 Ah	24 V / 60 - 154 Ah	24 V / 80 - 154 Ah
Battery capacity	12 days with 20 alerts à 1 min.	18 days with 20 alerts à 1 min.	24 Tage with 20 alerts à 1 min.	70 days with 20 alerts à 1 min.
Temperature range electronics	-40° C to +70° C			
Temperature range batteries	-25° C to +60° C			
Protection class	IP 56			
Cabinet dimension (w x h x d) in mm	600 x 600 x 210	600 x 600 x 210	600 x 1000 x 250 / 800 x 1200 x 300	600 x 1000 x 250 / 800 x 1200 x 300
Weight in kg	70	70	88 - 147	115 - 147
Colour	RAL 7035			