

Wide-Area Notification

Acoustic Siren Horn ASH 125

- For broadcasting of alarms, tones, and voice announcements
- Optimum wide-area sound coverage and excellent audio quality
- Various setups possible with up to 8 siren horns
- For indoors and outdoors
- Sturdy design and highest reliability



ASH 125

Wide-Area Notification

Powerful and Flexible

The modular acoustic siren horns of the ASH 125 series from INDUSTRONIC can be used for different fields of application – they are ideal for broadcasting of alarms, siren tones and voice messages over large areas, but also for instructing staff in industrial or similar environments. The acoustic siren horns can be deployed as classic sirens, but also allow for the output of voice announcements with superb speech intelligibility.

Output of tones and voice

The wide audio bandwidth enables the broadcasting of alarm tones, live voice announcements as well as pre-recorded texts with excellent speech intelligibility. You can also combine siren tones and voice announcements.



Modular and scalable design

The modular design of the siren horns allows for different setup options depending on your requirements and the conditions on site. Up to 8 siren horns can be mounted to one mast. You can choose between 4 different alignments.



Rugged material

The solid siren horns are made of seawater-resistant aluminum and are rated with IP56 which provides reliable protection against dust and high-pressure water jets.



Highest availability

The integrated battery system used as emergency power supply enables uninterrupted operation. Furthermore, there are different redundancy concepts available. The siren horns are also monitored for failures.

You can control and maintain the siren horns via remote access.



High-power driver with excellent audio quality

The 125-W midrange compression driver and the exponential diffraction horn combine exceptional performance and high-power sound distribution to meet every need.

The audio bandwidth ranges from 275 Hz to 7 kHz. When operated under full load, a siren horn can produce a sound pressure level of up to 136 dB (A).

Caution! Wear ear protection when working in the vicinity of the sirens! Otherwise, you may suffer permanent hearing damage.



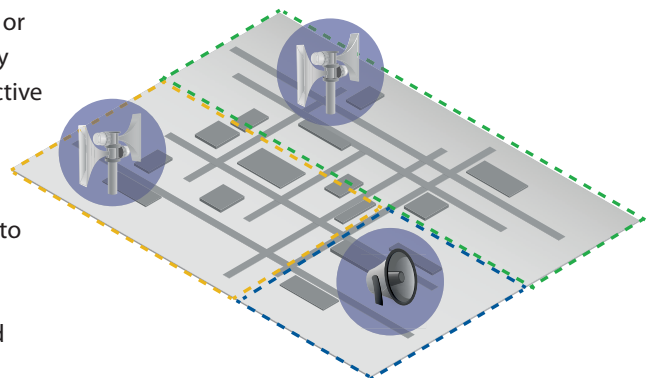
The siren horns are ideal for use in demanding industrial environments with high ambient noise levels.

Flexible addressing of speaker zones

Speaker zones can be addressed all at once or individually. This way, you can directly notify those areas which are affected in the respective situation.

Additionally, you can make use of visual signaling devices such as warning beacons to draw attention to an event.

You can also easily combine siren horns and speakers both indoors and outdoors.



INTRON-D *plus* System

Seamless Integration

The acoustic siren horns can be seamlessly integrated into the INTRON-D *plus* communication and public address system from INDUSTRONIC. This means that you can take full advantage of the complete functional scope of the INTRON-D *plus* system including speaker monitoring, zone selection, power supply and redundancy concepts.

INTRON-D *plus* system

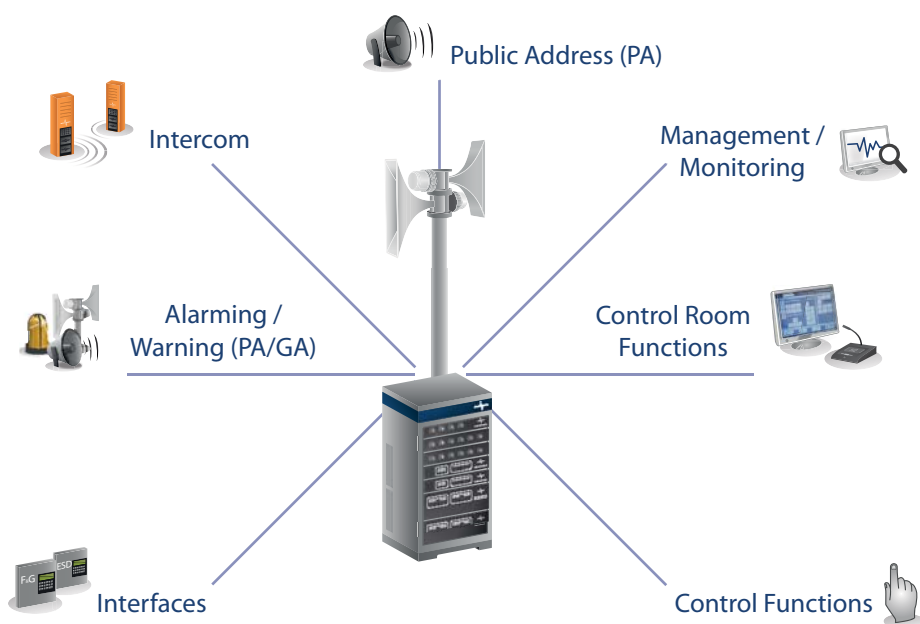
The INTRON-D *plus* communication and public address system from INDUSTRONIC excels by its wide range of functions as well as the flexible configuration possibilities to meet your application and communication requirements. Each system provides numerous interfaces for system networking, connection of external communication and control systems (e.g. fire detection and alarm systems) as well as the integration of control rooms. Furthermore, you can use different control and monitoring functions which facilitate the daily work of control room operators.

The INTRON-D *plus* combines three solutions in one: It can be used as PA system to inform all persons in an industrial plant or just a specific area, as intercom system for fast and reliable process communication or as PA/GA system to effectively warn people of dangers and to give clear instructions on how to respond.

- Wide range of functions
- Numerous interfaces for system networking
- Integrated speaker and siren monitoring as well as zone selection
- Individual redundancy concepts

INTRON-D *plus* - three solutions in one

The modular and flexible system design, the extensive range of functions and the numerous interfaces enable solutions to address every communication requirement.



Centralized or Decentralized System Installation

Individual Solutions

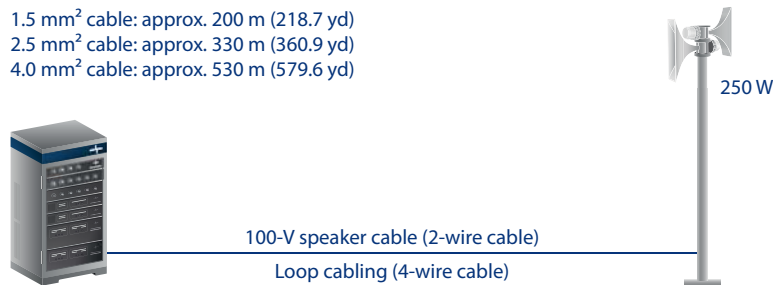
Centralized system installation

A centralized system installation is ideal for short cable runs. We recommend installing INTRON-D *plus* central exchange cabinets equipped with amplifiers, zone selector, line monitoring, power supply and batteries in relative proximity of the mast.

With the 100-V system and depending on the speaker cables used, longer cable runs are also possible.

100-V system with 20 % power loss (equals -1 dB)

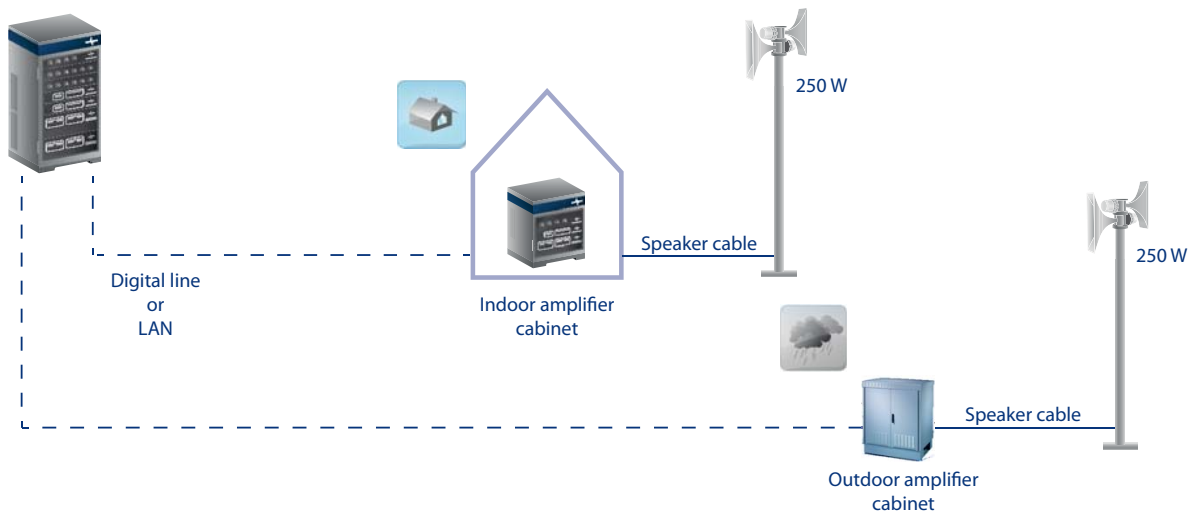
1.5 mm² cable: approx. 200 m (218.7 yd)
 2.5 mm² cable: approx. 330 m (360.9 yd)
 4.0 mm² cable: approx. 530 m (579.6 yd)



- Centralized installation for short cable runs
- Decentralized installation for wide areas and distributed systems
- Flexible installation locations for amplifiers (e.g. inside an amplifier cabinet indoors or outdoors)

Decentralized system installation

For wide areas or distributed systems with longer cable runs, we recommend using a decentralized system installation. Here, remote amplifier cabinets with amplifiers, controllers, batteries, power supply, etc. are installed near the masts and are connected to the INTRON-D *plus* system. You can also use backup batteries as emergency power supply.



IP Amplifiers or Digital Amplifiers

High-quality Notifications and Alarms

Depending on your requirements, you can choose between IP amplifiers and digital amplifiers.

IP-based PA unit of the NPA series

The multi-channel IP-based PA unit of the NPA series provides two amplifier slots. The amplifier modules are available in two different versions and can be mixed and matched to your preference. A maximum output power of 600 Watts can be reached. The maximum configuration of the NPA allows for the connection of up to 4 siren horns.

Due to the integrated monitoring function of the NPA, you can optionally monitor the circuits of each siren horn. The NPA itself comes with an integrated self-monitoring feature.

The volume of the amplifier channels can be set on the front panel or via the integrated web interface.



Digital power amplifier of the DVE series

The digital amplifier of the DVE series is available in two different designs: with 250-W or 500-W output power. For example, up to 4 siren horns can be connected to the 500-W series.

The amplifier can be fed via a power supply unit or via an external DC voltage power supply (48 V / 60 V). It can be flexibly controlled via digital or analog input.

The DVE provides integrated monitoring functions and is permanently monitored for proper operation, short circuit, excess temperature and voltage loss.



- Modular amplifier modules: up to 600 W output power
- Power supply via power supply unit (100 VAC to 276 VAC) or DC input (42 VDC to 72 VDC)
- High efficiency due to Class-D technology
- Centralized or decentralized installation via Ethernet/IP network
- Integrated amplifier monitoring
- Optional siren monitoring
- Intelligent backup control
- Remote access via integrated web interface anytime you want

- 100-V power amplifier
- 250 W or 2 x 250 W output power
- Power supply via power supply unit (115 VAC or 230 VAC) or DC input (42 VDC to 72 VDC)
- High efficiency due to Class-D technology
- Low requirements for emergency power supply
- High power density
- Integrated amplifier monitoring
- Optional siren monitoring
- Intelligent backup control

Installation and Mounting Adapted to Local Conditions

Different Setup Options

Depending on the conditions and requirements on site, you can mount 1 to 8 siren horns to one mast. Choose between 4 different setups and from a wide range of mounting accessories.

Installation of up to 8 siren horns at the same time

For broadcasting messages and tones over wide areas up to 8 siren horns can be mounted to a mast.

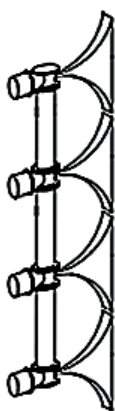
From 0° to 360° angle

The modular design of the siren horns allows for arranging them in one vertical row (directional 1), in two parallel vertical rows (directional 2), in two vertical rows each pointing in the opposite direction (omni-directional 1, setup: 180° angle) as well as uniformly arranged around the mast (omni-directional 2, setup: 360° angle).

- Less installation and cabling effort
- Easy and flexible mounting
- 1 to 8 siren horns mountable to a mast
- 4 different setups available
- Suitable accessories and mounting kits

Different arrangements

The illustration on the left shows the different arrangements with the maximum number of siren horns mounted to a mast.



Directional 1
(0°)



Directional 2
(2-Line-0°)



Omni-directional 1
(180°)



Omni-directional 2
(360°)

Installation location and geographical conditions

Choose the installation location which best suits your specific site requirements. Here, it is important to consider geographical conditions: Is there an open field or are there any potential obstacles such as buildings or trees.

Mounting and suitable accessories

The siren horns are supplied pre-wired and can be mounted to buildings and load-bearing walls, on roofs, but also to a free-standing mast. For this purpose, we provide different accessories and suitable mounting kits. We will be happy to advise you.

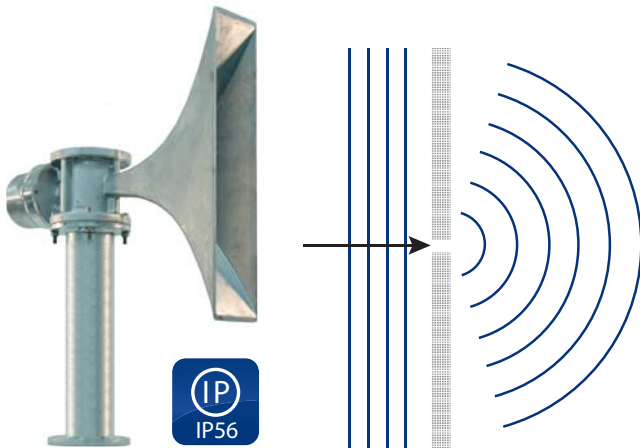
Diffraction Horn

Optimum Sound Propagation

The acoustic siren horn consists of a so-called diffraction horn which delivers optimum sound propagation.

Diffraction gap

The diffraction gap ensures that sound radiates in an almost hemispherical pattern (180°). A sound distribution of almost 360° can be reached with a combination of 2 horns each pointing in the opposite direction.



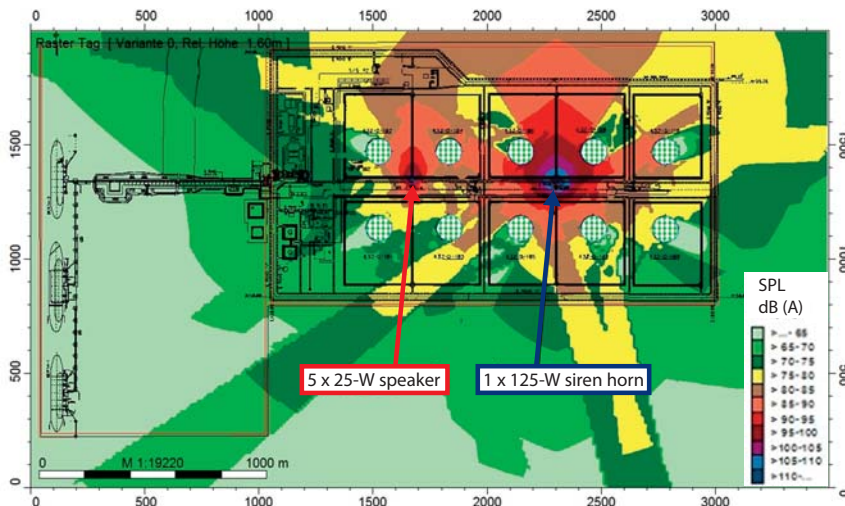
- Seawater-resistant aluminum
- Degree of protection IP56
- Sturdy design
- Up to 360° coverage

Hemispherical sound propagation

The illustration shows the almost hemispherical sound propagation of the diffraction horn.

Optimum sound coverage over wide areas

Due to the hemispherical sound propagation and the high-power driver with excellent audio quality, wider areas can be covered than with a common speaker arrangement which is more suitable for directional coverage.



Comparison of sound coverage

The illustration shows the significantly higher sound coverage that can be reached with only one 125-W siren horn on the right compared to a mast with 5 x 25-W speakers on the left.

Technical Data

Electrical Data 1 ASH 125		Environmental Requirements and Standards	
Rated power	125 W	Ambient temperature during operation	-50 °C to +70 °C (-58 °F to +158 °F)
Transformer	100 V / 150 VA	Relative humidity (non-condensing)	Max. 95 %
Sound pressure level at 125 W / 1 m (3.3 ft) / 1 kHz	133 dB (+/-3 dB)	Degree of protection	IP56
Effective frequency range	275 Hz to 7,000 Hz		

Mechanical Data 1 ASH 125	
Housing	Aluminum ALSi7Mg0,35F
Width x height x depth	180 mm x 641 mm x 610 mm (7.1" x 25.2" x 24")
Color	Silver
Weight	11 kg (24.3 lbs)
Mounting	Siren mast (Bolt circle Ø 156 mm (Ø 6.1"))

Order Data

Type	Description	Type Number
1 ASH 125	Acoustic siren horn 1 x 125 Watts for alarms and voice announcements, for the connection to 100-V PA systems, frequency range up to 7 kHz	208-100-100
1 ASH 125/L8	Acoustic siren horn 1 x 125 Watts for alarms and voice announcements, for the connection to 100-V PA systems, frequency range up to 7 kHz, with pre-wired 8 m connection cable 2 x 1.5 mm ²	208-100-100/L8

Accessories

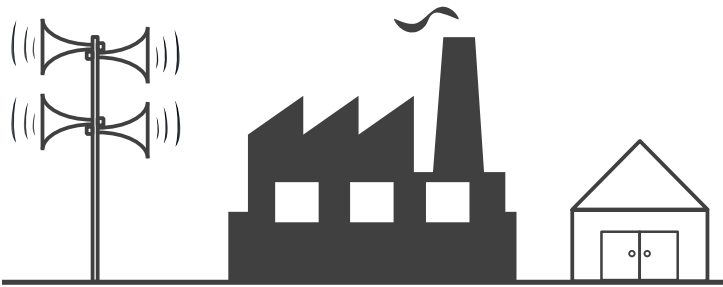
We provide different accessories and mounting sets for your specific application. Contact us. Our team will be happy to support you.

Possible Applications

For All Industries

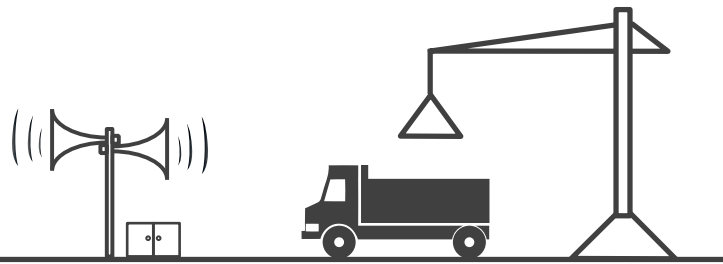
The acoustic siren horns can be adapted to suit your specific communication and site requirements. They can be deployed in a wide range of applications. Whether they are used to notify people on a large construction site, across an entire industrial plant, or as mobile siren systems. Explore the possibilities. The following examples are only a small selection of the wide range of possible applications.

Plant-wide warning and notification both indoors and outdoors



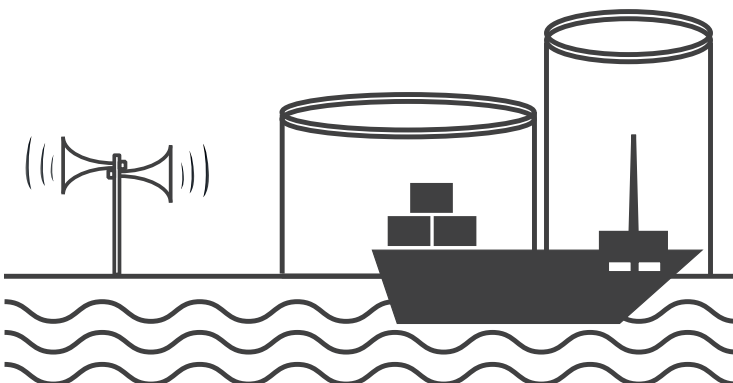
- Wide-area notification across the entire plant or of individual zones

Mobile siren systems for construction sites



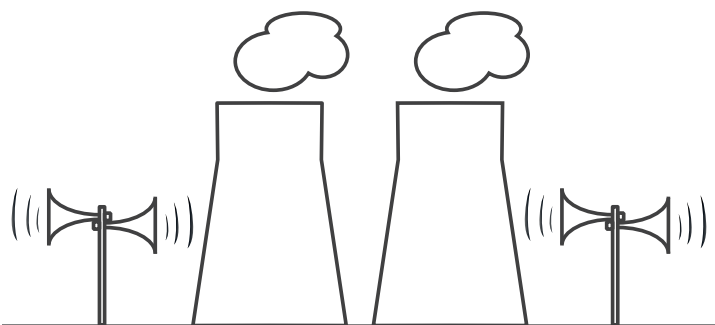
- Maximum flexibility with low cabling effort

Tank farms with marine loading terminals



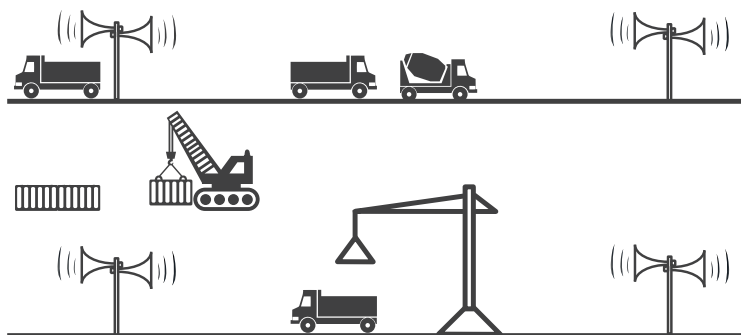
- Optimum protection against salty air and water contact due to seawater-resistant aluminum

Power plants with cooling towers



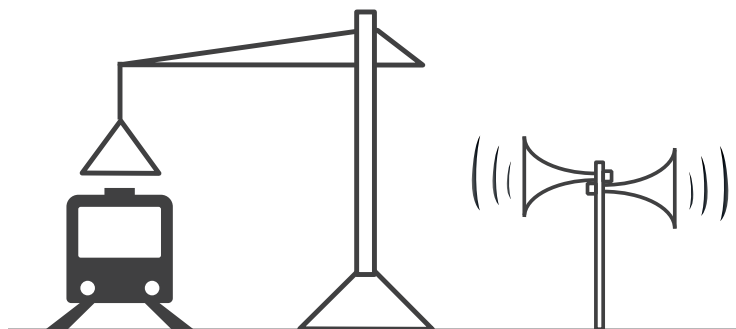
- Clear advantage when it comes to obstacles compared to the high sound absorption of conventional speakers

Large construction sites



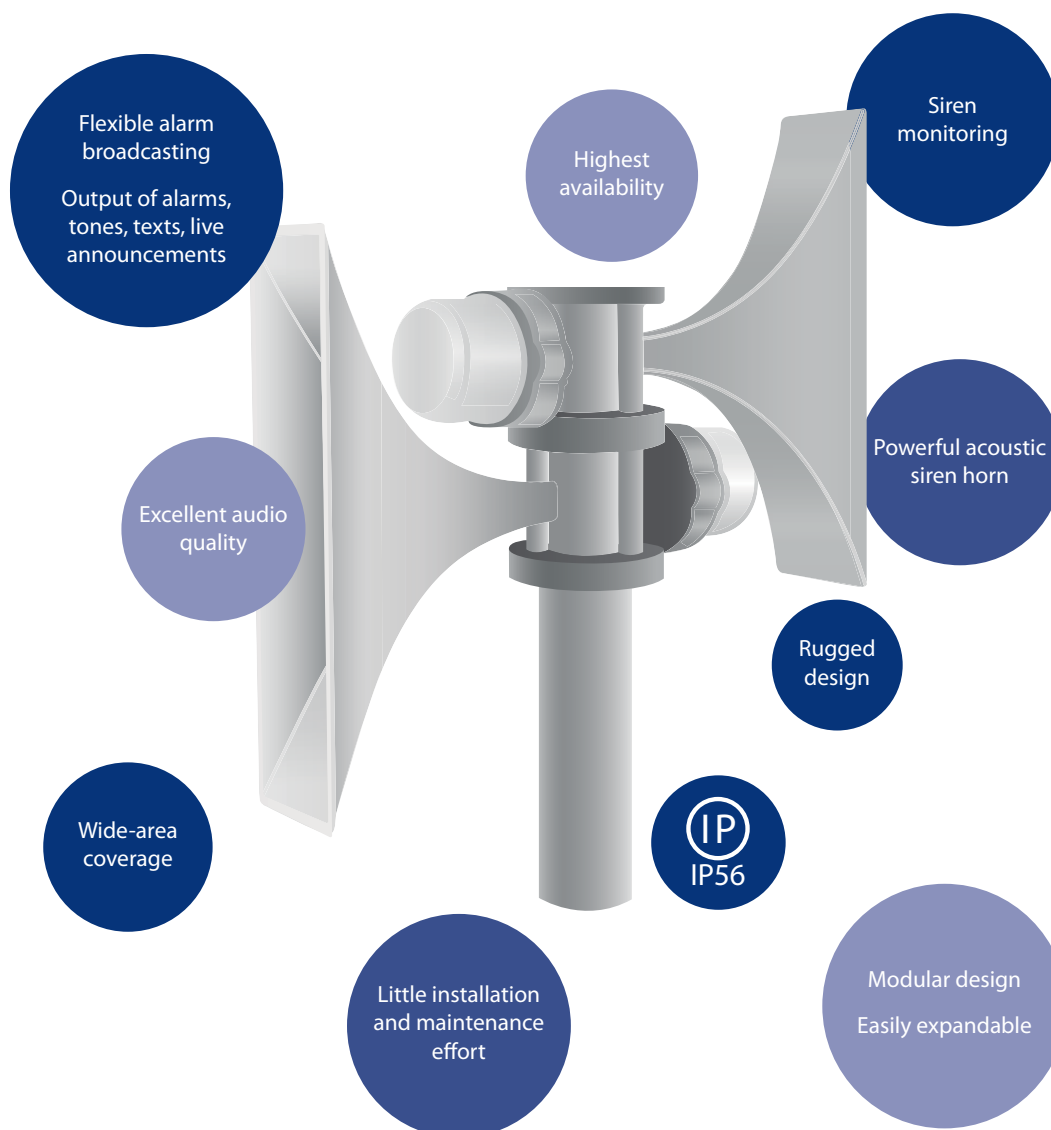
- Optimum sound coverage also in areas with high ambient noise levels

Freight stations



- Giving clear instructions over large distances

All Benefits at a Glance



INDUSTRONIC®

Industrie-Electronic GmbH & Co. KG

Carl-Jacob-Kolb-Weg 1

97877 Wertheim / Germany

Phone: +49 9342 871-0

Fax: +49 9342 871-565

info@industronic.de

www.industronic.de

Copyright © 2017 INDUSTRONIC®

Subject to technical modifications

Doc. no. FLY-330-001-361-EN • Rev. 2 • 16.10.2017