

A photograph of a large, modern, grey electronic siren mounted on a rooftop. The siren has a complex, multi-faceted design with several large, curved panels. In the background, a cityscape is visible under a clear blue sky, with a bright sun low on the horizon, creating a lens flare effect. A red horizontal bar is overlaid on the bottom of the image, containing the text 'WARNING AND NOTIFICATION' in white.

WARNING AND NOTIFICATION

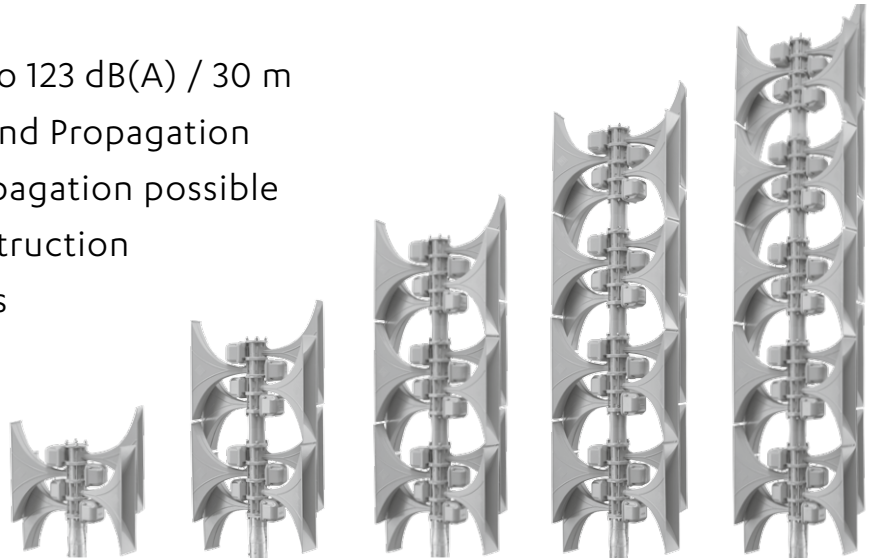
## Electronic Siren ECN-D

- Latest digital technology
- Durable and reliable technology
- Low battery consumption
- Simple maintenance thanks to 19-inch standard
- Spare parts guarantee of at least 10 years  
with equivalent replacement parts and functionally  
identical components
- Extensive service network

Our electronic sirens are the result of over 70 years of expertise in the development and production of siren warning systems ‚Made in Germany‘. An extensive service network, high product quality and long-standing customer relationships distinguish us as a reliable partner.

## Siren Head

- Sound Pressure Level up to 123 dB(A) / 30 m
- 360° Omnidirectional Sound Propagation
- Unidirectional Sound Propagation possible
- Modular Siren Head Construction
- Weatherproof Siren Horns
- Installation with Pole on Building, Installation with Mast on Ground



## The Concept of the Electronic Siren

Latest technology combined with our long time experience in siren development has led to the new siren generation ECN-D (electronic siren with digital amplifiers). The electronic siren ECN-D, supplied by inbuilt batteries for independence from external power supply during emergency conditions, offers local and remote operations, activation of customized alarms, customized messages and live PA announcements, a variety of inbuilt test routines; advantages and features already known for the long time proven electronic siren ECN.

Use of new fully digital amplifiers increase the efficiency to above 97%. At the same time, energy consumption, weight and space requirement of the electronic cabinet are significantly reduced. Modular design, variable interfaces and the strict compliance with technical standards, make it possible to take special customer requirements into account and offer the best prerequisites for a reliable, customized siren warning system.

## Targeted Coverage through Directional Siren Installation

Unidirectional sirens enable targeted sound coverage exactly where it is needed. Through flexible alignment of sound emission, specific areas can be precisely reached and the warning effect can be optimally controlled. This ensures effective alerting even in complex urban or topographically challenging environments.

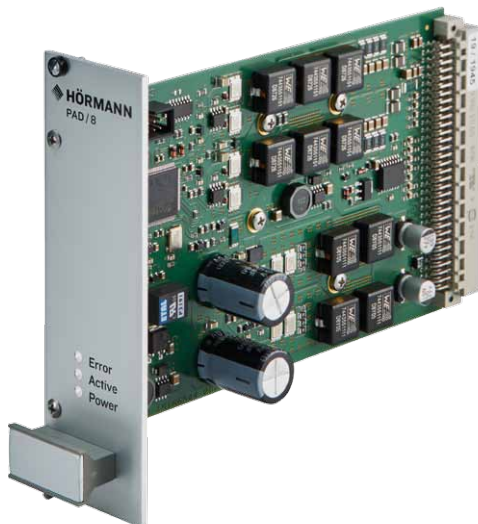
HÖRMANN designed and developed the horn for the ECN siren using and taking into consideration physical and acoustic laws, to achieve best propagation of the sound.

The ECN siren horn expands towards the opening in accordance with an exponential function and was specifically designed to amplify siren signals to the highest possible volume.

This special design ensures optimal sound wave propagation within the siren horn and has proven its worth in generating loud signals.

## Siren Cabinet

- Activation of Alarms, Voice Messages
- 19" Technology with Swing Frame
- Easy Expansion and Adaption
- Batteries 24 VDC for independence from external Power Supply
- 230 VAC or 110 VAC +/- 10% and / or Solar Power Supply
- Installation on Wall / Pole / Mast
- Minimum Maintenance Requirements



## Class-D Amplifier PAD / 8

- Continuous Output Power 300 Watt at 5-7 Ohm
- Bandwidth 100 Hz – 20 kHz
- Efficiency above 97%
- Distortion less 4%
- Overload Protection
- Short Circuit Protection
- Status LEDs
- 19" Plug-in Module, 8 HP
- Weight 0,3 kg

## Siren Control Processor CP1+

- Embedded ARM7 CPU
- RTX-OS Realtime Multitasking Operating System
- HÖRMANN Process System Interface
- Diverse Interfaces: Ethernet (TCP/IP), Digital Radio, Mobile Communication (4G/5G), Fibre Optic, Satellite, RS232/RS485
- LCD Display to show all Operating Steps and Results
- Robust Foil Keypad as Input Device for all Operations
- SD-Card Reader for Software Update (for Update of Alarms and Messages)



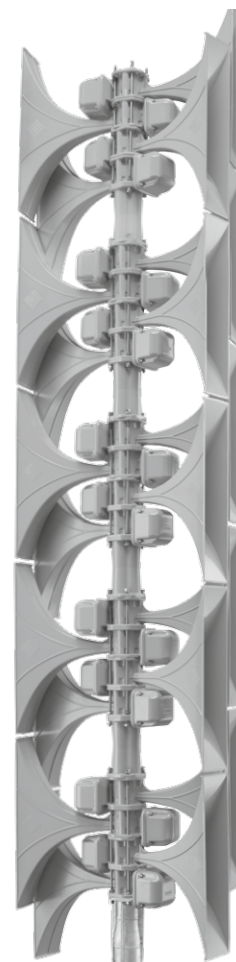
<b>ELECTRONIC SIREN</b>	<b>600-D</b>	<b>1200-D</b>	<b>1800-D</b>	<b>2400-D</b>	<b>3000-D</b>
Sound Pressure Level (SPL)	109 dB(A) / 30 m	115 dB(A) / 30 m	118 dB(A) / 30 m	121 dB(A) / 30 m	123 dB(A) / 30 m
Number of Horns / Drivers	4	8	12	16	20
Head Dimension (W x H x D) in mm	280 x 960 x 840	280 x 1660 x 840	280 x 2260 x 840	280 x 2900 x 840	280 x 3550 x 840
Weight Siren Head	28 kg	59 kg	89 kg	121 kg	152 kg
Windload (160km/h)	522 N	1064 N	1614 N	2200 N	2650 N
Number of Class-D Amplifiers	2	4	6	8	10
Weight Siren Cabinet in kg (incl. Batteries)	82 kg	83 kg	84 kg	85 kg	86 kg

## SYSTEM

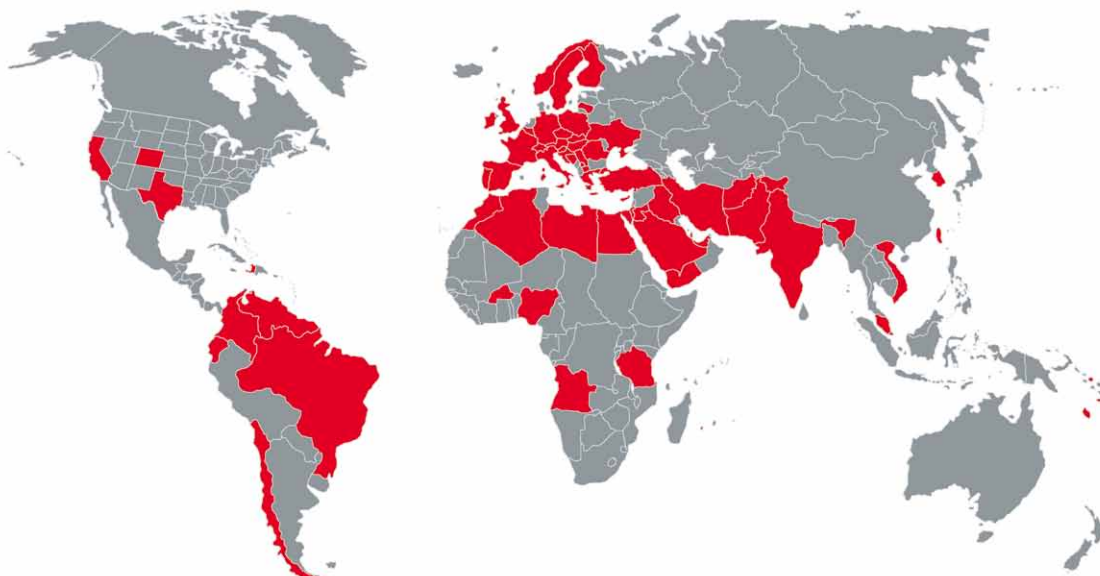
Fundamental Frequency	415 Hz / 425 Hz
Alarms (Warning Tones)	15 (customized)
Messages (Pre-recorded Voice)	15 (customized)
Standby Time	10 days
Batteries Capacity without charge	18 – 167 minutes (depending on the size of the siren)
Material of Horns	Aluminium (Alloy)

## SIREN CABINET

Mains Power Supply (single phase)	230 VAC or 110 VAC +/- 10%
Solar Power Supply	optional
Operating Voltage / Batteries	24 VDC
Maximum Charging Current	2,2 A
Cabinet Dimensions (W x H x D)	600 x 600 x 350 mm
Protection Class	IP66
Ambient Temperature Range	-25°C ... +65°C



## LOCATIONS



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