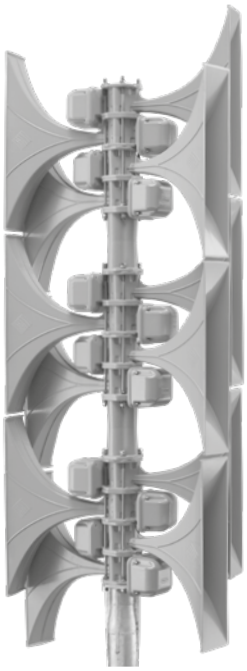
HÖRMANN Warnsysteme

WARNING AND NOTIFICATION

Electronic Siren ECN 1800-D



SIREN HEAD
Siren head consisting of self-supporting siren horns in modular construction. Single slit diffraction effect leads to 360° omnidirectional sound propagation.

SYSTEM

Sound Pressure Level	118 dB (A) / 30 m
Fundamental Frequency	415 Hz / 425 Hz
Alarms (Warning Tones)	9 (customized)
Messages (Pre-recorded Voice)	12 (customized)
Standby Time	up to 7 days
Battery Capacity during 48h without charge	up to 20 minutes activation

SIREN HEAD

Number of Horns / Drivers	12
Weight Siren Head	89 kg
Head Dimension (W x H x D)	280 x 2260 x 840 mm
Windload at 160 km/h	1614 N
Material of Horns	Aluminium (Alloy)

SIREN CABINET

Number of Class-D Amplifiers	6
Operating Voltage / Batteries	24 VDC
Mains Power Supply	230 VAC or 110 VAC +/-10%
Maximum Charging Current	4 A
Solar Power Supply	optional / on request
Local Activation and Control	Foil Keypad with LCD Display
Cabinet Dimensions (W x H x D)	600 x 600 x 350 mm
Cabinet Design	Stainless Steel or Powder Coated
Protection Class	IP66
Weight incl. Batteries	84 kg
Cabinet Ambient Temperature Range	-25°C... +65°C

Specifications are subject to change without notice.

SIRENEN CABINET
Compact and clearly designed, based on 19“ plug-in technology and modular construction. Robust assemblies with long design life guarantee maximum reliability.

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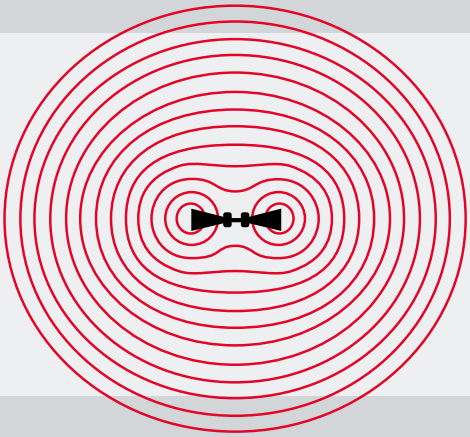
HORIZONTAL SOUND PROPAGATION

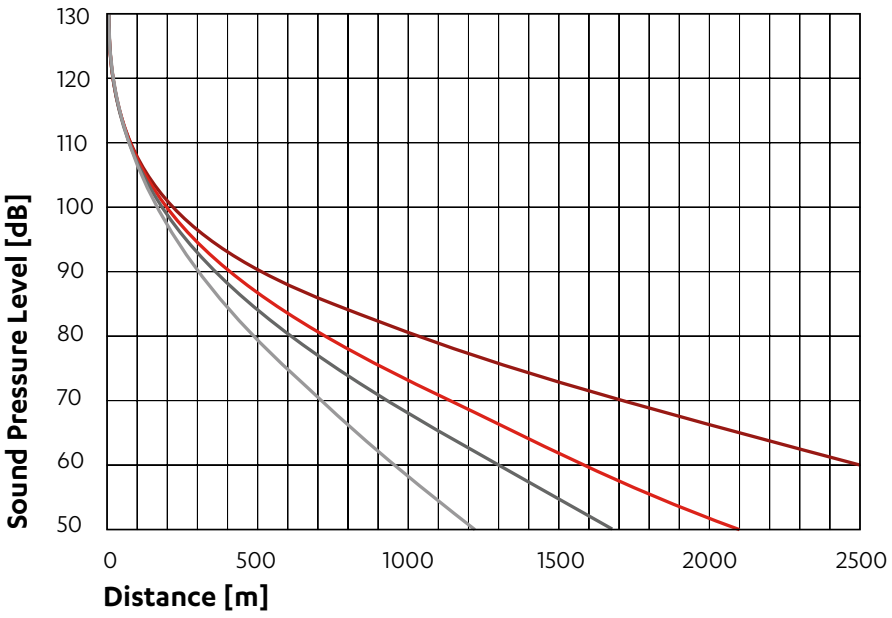
The siren horn´s omnidirectional of the sound wave in horizontal plane is based on the „Huygens principle“.
This physical guideline explains the diffraction of a sound wave at a single slit. Diffraction of sound results in a circular sound wave of omnidirectional characteristic, which leads to 360° sound propagation.



VERTICAL SOUND PROPAGATION

The ECN siren horn is a specific development with exponential increase of the horn´s cross sectional surface, to propagate alarms and messages with high sound intensity.
This special horn design assures optimum propagation of the sound wave within the horn, is widely in use, thoroughly tested and has proven the high perception by the public.

PROPAGATION OF SOUND PRESSURE LEVEL (SPL)



- Slightly populated area
  additional attenuation/100 m: 0,8 dB
- Low density area
  additional attenuation/100 m: 1,5 dB
- Medium density area
  additional attenuation/100 m: 2,0 dB
- High density area
  additional attenuation/100 m: 3,0 dB

Advice for planning: All values shown in the diagram should be understood as indicative values for theoretical planning.