

HOLOPLOT



# HOLOPLOT X1

## Modul 80-S

Data Sheet / Version 1.1 en

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# X1 Modul 80-S Data Sheet



E508851  
CCN: AZOT, AZOT7  
AV Equipment

## CONFIGURATION: THREE-LAYER MATRIX ARRANGEMENT

Sub layer	1x 18-inch sensor-controlled subwoofer with two high energy, high-density neodymium-iron-boron magnets in a bandpass enclosure with air-flow optimized ports
LF layer	16x 5-inch cone driver in individual dual-ported chambers
HF layer	64x 1.3-inch soft dome tweeter with integrated waveguides

## MAXIMUM SPL (for optimized parallel beam configuration<sup>1</sup>)

Sub layer	131 dB (full space) / 137 dB (half space) <sup>2</sup>
LF layer	141 dB <sup>2</sup>
HF layer	150 dB <sup>2</sup>

## FREQUENCY RESPONSE

±3 dB	30 - 18,000 Hz
-10 dB	26 - 20,000 Hz

## BEAMFORMING CAPABILITIES:<sup>3</sup> HOLOPLOT 3D AUDIO-BEAMFORMING TECHNOLOGY

Number of beams	Steering angle and Up to 12 beams in parallel per X1 Matrix Array: <ul style="list-style-type: none"><li>• 8 fully user-configurable parametric beams and virtual sources</li><li>• 4 beams providing optimized coverage over a predefined audience area</li></ul>
Vertical	Steering angle and opening angle user adjustable (0.1° steps) / defined by HOLOPLOT algorithms
Horizontal	Steering angle and opening angle user adjustable (0.1° steps) / defined by HOLOPLOT algorithms

<sup>1</sup> Max. SPL capabilities are dependent on beam configuration and array size and should be assessed using *HOLOPLOT Plan*

<sup>2</sup> Peak level referred back to 1 m under free field conditions using band-limited pink noise with crest factor 4

<sup>3</sup> Beamforming capabilities are dependent on array size and should be assessed using *HOLOPLOT Plan*

## AMPLIFICATION

Type	5x 16-channel digital amplifier modules  1x single-channel digital subwoofer amplifier module with differential pressure sensor and onboard zero-latency-DSP enabling adaptive closed-loop processing of the subwoofer driver signal
Max. Output Power <sup>4</sup>	Sub: 8,500 Wpk LF: 16x 500 Wpk HF: 64x 240 Wpk

## PROCESSING

Type	High-performance Field Programmable Gate Array (FPGA) computing the HOLOPLOT proprietary digital signal processing algorithms for 3D Audio-Beamforming and Wave Field Synthesis  Dual-core ARM® Cortex™-A9 running HOLOPLOT OS, a Linux-based, distributed audio operating system
DSP Channels	80 + 1
Computation	7,600 parametric EQ bands and more than 1,100 Finite Impulse Response (FIR) filters with over 430,000 filter taps

## POWER CONSUMPTION

Sleep Mode	140 W
Idle	400 W
Continuous	1,040 W
Max Power	1,710 W

## CONNECTORS ON ELECTRONICS PACKAGE

Control/Audio	4x etherCON Cat 6A (RJ45) for Control and Audio-over-IP (RAVENNA, Dante®, AES67) 2x etherCON Cat 6A (RJ45) for HoloLink 2x etherCON Cat 6A (RJ45) for SubLink
Power	1x Amphenol HP-3-MDQ for AC Power IN (115 - 240 V AC, 50 - 60 Hz) 1x Amphenol HP-3-MDGQ for AC Power OUT (208 - 240 V AC, 50 - 60 Hz)

## CONNECTORS ON LOUDSPEAKER CABINET FOR SUBWOOFER MODULE

Control/Audio	1x etherCON Cat 6A (RJ45) for SubLink
Power	1x Amphenol HP-3-MDQ for AC Power IN (115 - 240 V AC, 50 - 60 Hz)

<sup>4</sup> Peak power based on the maximum unclipped voltage the amplifier will produce into the nominal load impedance

PHYSICAL CHARACTERISTICS

Dimensions	800 mm x 600 mm x 981 mm (±2.5 mm)
Weight	160 kg

MATERIALS AND COLOURS

Loudspeaker Cabinet - front	Glass fiber-reinforced polycarbonate, flame retardant, textured black finish (RAL 9005)
Loudspeaker Cabinet - rear	Premium multi-ply Finnish Birch Plywood, Polyurea finish, textured black (RAL 9005)
Electronics Package	Aluminum alloy, powder-coated black (RAL 9005)
Protective Grille	Hexagon-perforated steel with hydrophobic, damp, and dust repellent acoustic cloth, black (RAL 9005)

ENVIRONMENTAL CONDITIONS

Device Condition	Temperature	Humidity	Altitude
Packaged in shipping box	-20 °C to +60 °C	to 90% at +60 °C	to 12,000 m MSL
Operating	+10 °C to +45 °C	to 70% at +45° C (non-condensing)	to 2,000 m MSL

MECHANICAL DETAILS  
All measurements given in mm

