

Ring32 AC Pro

32 CHANNEL SYSTEM FOR 2D MEASUREMENTS



The 32 channel ring array is primarily designed for measurements in acoustic laboratories, but is also used in a wide variety of other applications and environments, such as component testing and troubleshooting. The light carbon structure ensures easy handling and quick, precise array positioning.

Due to its small size, the Ring32 array can also be used in difficult to access measurement environments. The ring geometry ensures robust performance and minimal aliasing effects.

The array comes with an integrated Intel® RealSense™ Depth Camera which features Full HD resolution and the ability to record depth information.

BENEFITS

- Universal tool for sound localization in the high frequency range
- Easy handling and accurate microphone positioning
- Suitable for the most diverse measurement environments
- Suitable for difficult to access measurement environments

APPLICATIONS

- High frequency component testing
- Beamforming measurements in acoustic labs
- Quality management in design and development of products
- Troubleshooting of small and medium sized measurement objects



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TECHNICAL DATA

Size and Weight

Array-body diameter	35 cm
Weight	1.2 kg

Features

Video camera	Intel® RealSense™ Depth Camera D435
	Optional: Baumer VLG-22C
Resolution	1920 x 1080 (Full HD)

Operating Conditions

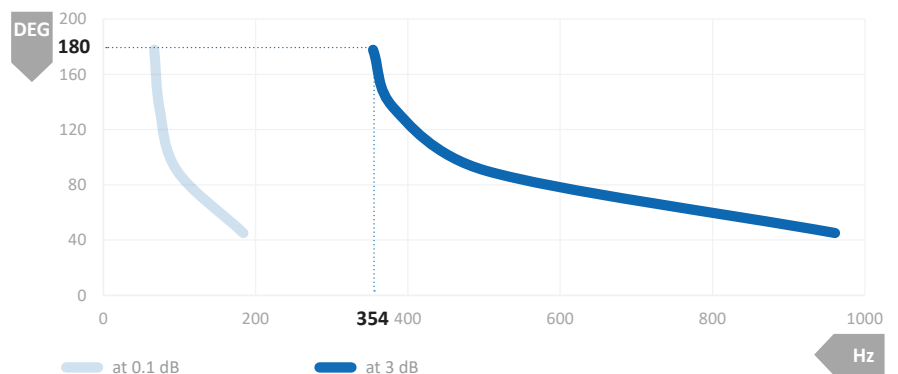
Ingress protection code	IP20
Cable length to data recorder	Up to 20 m (on request: 50 m)
Operating environment	0°C - 35°C, up to 80% RH (RealSense) 0°C - 45°C, up to 80% RH (Baumer)

Microphone Data

Microphones	Electret condenser capsule + special designed preamplifier
Frequency response	100 Hz – 15 kHz (< 0.5 dB) 20 Hz – 20 kHz (< 3 dB)
Max. sound pressure level	130 dB at 3% THD
Noise level	27 dB(A)
Sensitivity	20 mV/Pa

Array Data

Channels	32
Recommended measurement distance	> 0.3 m
Acoustic mapping range	13 dB – 130 dB
Recommended mapping frequencies	354 Hz – 20 kHz (60 kHz)
Dynamic range*	9 dB – 11 dB, up to 50 dB with Advanced Algorithms



Calculation of the lowest frequency (Hz) at 180° opening angle (DEG)

* Distance to the source: 1 m; calculation points: 90,000