



# Acoustic Camera Array Ring72 AC Pro

72 Channel System for Various Measurement Scenarios



The 72 channel ring array is primarily designed for 2D measurements in acoustic laboratories, but also for outdoor measurements of larger objects. The light carbon structure ensures easy handling and quick, precise array positioning.

The ring geometry ensures the greatest versatility and best possible local resolution of the acoustic map. Depending on your requirements, 100 cm, 120 cm and 140 cm diameter ring array models can also be provided with the same amount of channels.

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

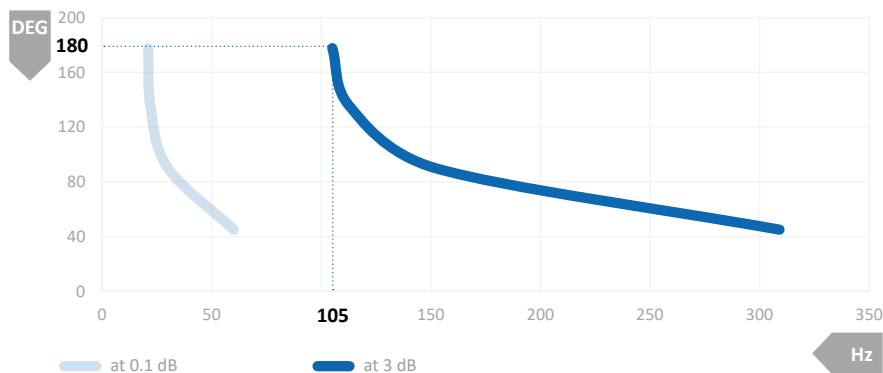
- Innovative tool for fault detection and quality control
- Sound localization based on variations in sound emissions
- Engine measurements
- Troubleshooting for larger objects



# Acoustic Camera Array Ring72 AC Pro

SIZE AND WEIGHT	
Array-body diameter	100 cm, 120 cm or 140 cm
Weight	4 kg
FEATURES	
Video camera	Intel® RealSense™ Depth Camera D435 Optional: Baumer VCXG-25C
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	20 kHz – 60 kHz (< 15 dB) 100 Hz – 15 kHz (< 0.5 dB) 20 Hz – 20 kHz (< 3 dB)
Max. sound pressure level	130 dB peak at 3 % THD
Noise level	27 dB(A)
Sensitivity	20 mV/Pa
ARRAY DATA	
Channels	72
Recommended measurement distance	> 0.5 m
Acoustic mapping range	10 dB – 130 dB
Recommended mapping frequencies	105 Hz – 20 kHz (60kHz)
Dynamic range*	8 dB – 12 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

