



Acoustic Camera Array Paddle2x24 AC Pro

48 Channel Intensity System for Low Frequencies



The Paddle2x24 array consists of 24 intensity probes – one pair of microphones each. This enables a local mapping of intensity, which is proportional to the sound power. Therefore, the Paddle shows a local intensity distribution, useful for identifying complex sources at close range.

Due to the intensity probes used, the array has a strong directivity. Therefore, the measurements can focus on individual machine sections while also being achievable in acoustically unfavourable environments.

The Paddle is used for acoustic near field measurements at low frequencies. This array is impressive not only visually, but functionally. While the array design is acoustically transparent and stable, it is also easy to handle.

BENEFITS

- Compact and easy to use
- Very fast and flexible test setup
- Portable handheld system
- Sound maps of intensity and pressure
- Operating in non-ideal test environments
- Back noise suppression through intensity method
- Rear reflections have no influence on the measurement result
- Trigger button for a fast and easy localization of the sound sources

APPLICATIONS

- Very low frequencies
- Stationary sound sources
- Medium to large sized consumer products
- Underhood measurements
- Sound pressure measurements

An integrated Baumer VCXG-25C with wide-angle lens provides ideal reference images for the short working distances.



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SIZE AND WEIGHT	
Array-body dimensions	34 x 32 x 16 cm
Weight	1.2 kg
FEATURES	
Video camera	Baumer VCXG-25C (wide-angle lens)
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 – 45°C, up to 80 % RH

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 at 3 % THD
Noise level	27 dB(A)
Sensitivity	20 mV/Pa
ARRAY DATA	
Channels	48 (= 24 intensity probes)
Recommended measurement distance	> 0.1 m
Acoustic mapping range	23 dB – 130 dB
Recommended mapping frequencies	30 Hz – 2 kHz
Dynamic range	9 dB – 23 dB

