

# Paddle2x52 AC Pro

## 104 CHANNEL INTENSITY SYSTEM FOR LOW FREQUENCIES



### 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

The Paddle2x52 consists of 52 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.

An integrated Baumer VLG-22C with wide-angle lens provides ideal reference images for the short working distances.

### APPLICATIONS

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



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### TECHNICAL DATA



#### Size and Weight

|                       |                 |
|-----------------------|-----------------|
| Array-body dimensions | 71 x 35 x 16 cm |
| Weight                | 1.6 kg          |

#### Features

|              |                                  |
|--------------|----------------------------------|
| Video camera | Baumer VLG-22C (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<br>+ special designed preamplifier |
| Frequency response        | 20 Hz – 15 kHz (< 0.5 dB)<br>10 Hz – 20 kHz (< 3 dB)          |
| Max. sound pressure level | 130 dB at 3% THD  |
| Noise level               | 27.5 dB(A)  |
| Sensitivity               | 20 mV/Pa  |

#### Array Data

|                                  |                             |
|----------------------------------|-----------------------------|
| Channels                         | 104 (= 52 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 – 25 dB                |