

# SOUND LEVEL METER

PCE-AIC 50



- » **64-channel MEMS digital microphone for precise sound source localization**
- » **Frequency range from 2 kHz to 100 kHz for high-frequency sound signals**
- » **Detection range from 0.3 m to 50 m**
- » **Frame rate  $\geq 25$  FPS for acoustic imaging**
- » **Gas leakage and leak loss estimation integrated**
- » **12-megapixel camera with 72° field of view and fixed focal length of 3.9 mm**
- » **Memory: TF card slot for up to 512 GB**
- » **Wireless image transmission**
- » **Tripod mounting 1/4 inch**

The Sound level meter is a powerful measuring system for the fast and reliable localization of sound sources as well as the detection of compressed air, gas and vacuum leaks. Thanks to state-of-the-art MEMS microphone technology, high-resolution imaging and intelligent analysis software, the Sound level meter enables precise acoustic visualization even in demanding industrial environments.

Equipped with a 64-channel MEMS digital microphone, the Sound level meter captures sound signals in the frequency range from 2 kHz to 100 kHz. This makes it possible to precisely locate both audible and high-frequency noises. The detection range from 0.3 to 50 metres allows flexible use - from near-field analysis to the inspection of larger systems.

For detailed visual documentation, the Acoustic Camera features an integrated 12-megapixel camera with a 72° field of view and a fixed focal length of 3.9 mm. With a frame rate of at least 25 FPS, acoustic and optical information are smoothly combined so that sound sources can be displayed in real time.

In addition to precise sound source localisation, the Acoustic Camera offers integrated gas leakage and leak loss estimation. Various imaging modes - including single target, multiple target and acoustic holography - allow optimum adaptation to different measurement tasks.

## Specification

| General technical data        |                                                                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of measuring channels  | 64                                                                                                                                                  |
| Frequency                     | 2 ... 100 kHz                                                                                                                                       |
| Display type                  | LCD                                                                                                                                                 |
| Display size                  | 3,5 Inch                                                                                                                                            |
| Display resolution            | 640x480                                                                                                                                             |
| Storage medium                | Micro SD card                                                                                                                                       |
| Storage capacity              | 8 GB                                                                                                                                                |
| Interface                     | USB-C, WLAN                                                                                                                                         |
| Radio standard                | 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac                                                                                                        |
| Sensor additional information | Sensitivity: -26 ±1 dBFS                                                                                                                            |
| Camera resolution             | 640x480                                                                                                                                             |
| Tripod thread                 | 1/4 inch                                                                                                                                            |
| Field of vision (FOV)         | 72°±3°                                                                                                                                              |
| Colour palette                | Rainbow, Iron red, White hot                                                                                                                        |
| Sensors                       | MEMS microphone                                                                                                                                     |
| Pixel size                    | 12 µm                                                                                                                                               |
| Frame rate                    | 25 FPS                                                                                                                                              |
| Focus                         | Fixed 3.9 mm                                                                                                                                        |
| Detection range               | 0.3 ... 50 m                                                                                                                                        |
| Menu language                 | German, English (GB), English, Spanish, Chinese, Russian, French, Italian, Thai, Polish, Czech, Turkish, Korean, Finnish, Japanese, Swedish, Bahasa |
| Protection class (device)     | IP52                                                                                                                                                |
| Power supply                  | 5V DC (USB-C)                                                                                                                                       |
| (Rechargeable) battery        | 2 x 3,7 V Battery pack , Lithium-ion battery                                                                                                        |
| Capacity                      | 5000 mAh                                                                                                                                            |
| Performance                   | 18,25 Wh                                                                                                                                            |
| Operating conditions          | -20 ... 55 °C , 10 ... 95 % RH                                                                                                                      |
| Storage conditions            | -30 ... 65 °C , 10 ... 95 % RH                                                                                                                      |
| Dimensions ( L x W x H )      | 245 x 95 x 80 mm                                                                                                                                    |
| Weight                        | 425 g                                                                                                                                               |