

GRAS 50GI-P

CCP Rugged Intensity Probe



Freq range: IEC 61043 Class 1
Dyn range: 27 dB(A) to 146 dB
Sensitivity: 12.5 mV/Pa

Type 50GI-P is a sound intensity probe for direct connection to signal analyzers or data acquisition devices with IEPE inputs. The probe includes a pair of phase-matched prepolarized precision microphones which meet the requirements in IEC standard 61043 for a class-1 intensity probe.

Typical applications and use

- Sound intensity measurements
- Sound source location
- Sound power measurements
- IEC 61043 standard measurements
- Sound source ranking
- Sound intensity mapping

Design

The probe set includes solid interchangeable spacers for microphone separations from 12 mm to 50 mm so that the probe can cover the frequency range from 100 Hz to 10 kHz.

All components are made specifically for sound intensity applications. Each small ¼" diameter by 40 mm long microphone preamplifier is housed in a robust stainless steel casing. The probe head is symmetrical which enables reliable calibrations as described in the proposed standard (ISO/DIS 9614-2) for sound power measurements using sound intensity measurements.

The GRAS 50GI-P CCP Intensity Probe comprises a 40GK-S1 sound Intensity Microphone Pair, two 26CC CCP Microphone Preamplifiers, three solid spacers of various lengths, windscreen and a probe handle.

The 50GI-P is delivered in a carrying case as a ready-to-use kit, complete with all the above accessories.

The microphones are ½" free-field prepolarized microphones with a uniquely-designed pressure equalisation system, which ensures extremely well defined phase characteristics.

The microphones and preamplifiers are mounted on a swivel head on the telescopic arm of the handle. To cover the frequency range from 100 Hz to 10 kHz, the 50GI-P probe is delivered with three solid

spacers for spacing the microphones at 12 mm, 25 mm, and 50 mm. These spacers can be easily interchanged without dismantling the probe.

| | | |
|-----------------------------------|--------|--------------|
| Polarization/Connection | | 0 V / CCP |
| Frequency range (± 2 dB) | Hz | IEC 61043 |
| IEC 61094-4 Compliance | | WS3P |
| CE/RoHS compliant/WEEE registered | | Yes/Yes/Yes |
| Weight | g / oz | 400 / 14.110 |

GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

Included

| | |
|-----------------------------|--|
| GRAS RA0213 | Rugged Probe Head |
| GRAS 40GK | ½" Intensity Microphone Set |
| GRAS 26CC | ¼ CCP Preamplifier set |
| GRAS AA0068 | 25 cm Cable SMB angled - Microdot |
| GRAS AA0070 | Microdot-BNC cable, Temperature max. 70 °C |
| GRAS AI0044 | Probe handle |
| GRAS AM0376 | Windscreen |

Optional

| | |
|---------------------------|---|
| GRAS 51AB | Phase Calibrator according to IEC 61043 |
| GRAS 42AP | Intelligent Pistonphone, Class 0 |
| GRAS 51AC | Sound Intensity Calibration Kit for 50AI-LP |

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GRAS Worldwide

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About GRAS Sound & Vibration

GRAS is a worldwide leader in the sound and vibration industry. We develop and manufacture state-of-the-art measurement microphones and related equipment for industries where acoustic measuring accuracy and repeatability are of the utmost importance. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, consumer electronics and other highly demanding industries. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect, trust and require.

GRAS Sound & Vibration is represented through subsidiaries and distributors in more than 40 countries and is part of Axiometrix Solutions, a leading test solutions provider comprised of globally recognized measurement brands. Read more at www.grasacoustics.com

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