

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 to industries where acoustic measuring accuracy and repeatability is of utmost importance in R&D, QA and production. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, and consumer electronics. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect and trust.

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