

GRAS 50GI-RP

CCP Rugged Intensity Probe



Freq range: IEC 61043 Class 1
Dyn range: 27 dB(A) to 163 dB
Sensitivity: 12.5 mV/Pa

Type 50GI-RP 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.

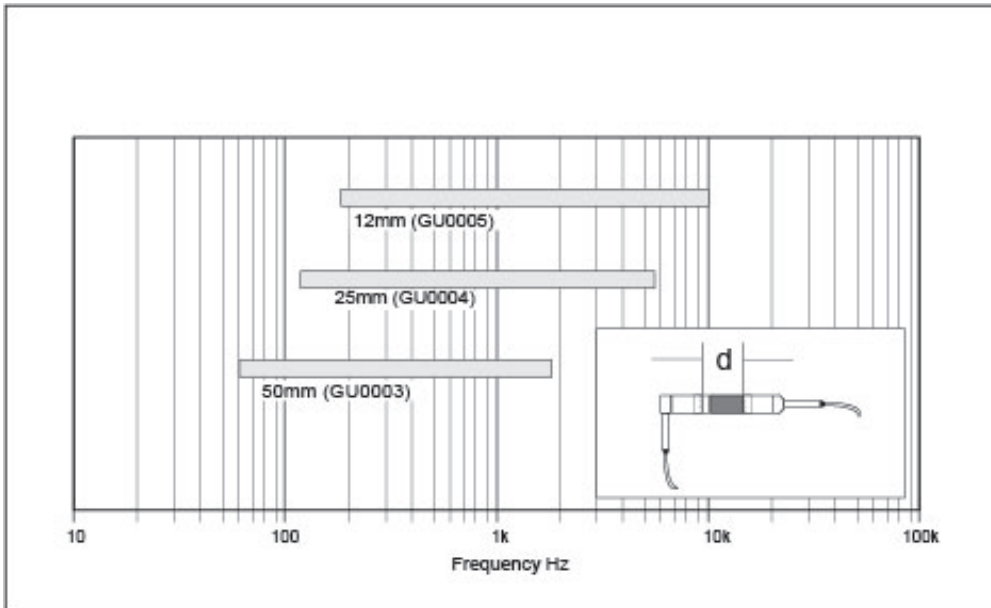
All components are made specifically for sound intensity applications. Each small 1/4" diameter by 40 mm long microphone preamplifier is housed in a robust stainless steel casing. The probe head is symmetrical which enables reliable calibrations as described in the proposed standard (ISO/DIS 9614-2) for sound power measurements using sound intensity measurements.

The GRAS 50GI-RP CCP Intensity Probe is a two-microphone sound intensity probe especially designed for use in conditions calling for a rugged design. It is equipped with CCP transducers and a remote control handle for direct connection to an intensity analyzer. The remote-controlled 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-RP is delivered in a carrying case as a ready-to-use kit, complete with all the above accessories.

The microphones are 1/2" 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.



Frequency ranges for different microphone spacers

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

Included

GRAS RA0213	Rugged Probe Head
GRAS 40GK-S1	1/2" Intensity Microphone Set
GRAS RA0001	Right-angled (90°) Adapter for 1/2" microphone and 1/4" preamplifier
GRAS GR0040	Holder for spacer
GRAS RA0264	Spacer, 50 mm
GRAS RA0265	Spacer, 25 mm
GRAS RA0266	Spacer, 12 mm
GRAS 26CC Set	1/4" CCP Preamplifier set
GRAS AA0021	5 m Extension Cable, 5 m, 12 pin LEMO male - male
GRAS AC0024	Adapter cable, 12-pin LEMO to D-sub + 2xBNC
GRAS KE0122	Serial (D-sub) to USB adapter
GRAS AI0048	Probe handle
GRAS AM0376	Windscreen

Optional

GRAS AA0010-S1	3 m LEMO 12-pin - Lemo 12-pin, Cable for Intensity Probe
GRAS AA0010	10 m LEMO 12-pin - Lemo 12-pin, Cable for Intensity Probe
GRAS 51AB	Intensity Calibrator
GRAS 42AP	Pistonphone with built-in barometer and thermometer (recommended)
GRAS 42AA	Pistonphone
GRAS RA0024	Two-port Calibration Coupler (for GRAS 42AP or 42AA Pistonphones)

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| We Make Microphones

Tradition

Since the establishment in 1994, GRAS has been 100% dedicated to developing and manufacturing high-quality measurement microphones and related acoustic equipment.

Innovation

We work with everybody with an interest in sound or noise within the fields of aerospace, automotive, audiology, consumer electronics, noise monitoring, building acoustics and telecommunications.

Quality

At GRAS we know that in order for you to trust your measurement results; signal quality, stability and robustness are essentials. We design and build them to perform under real life conditions – and beyond.

