

# GRAS 44AA

Mouth Simulator according to ITU-T  
Rec. P51 with built-in power amplifier



ITU-T rec.: P.51

Special feature: Built-in power amplifier

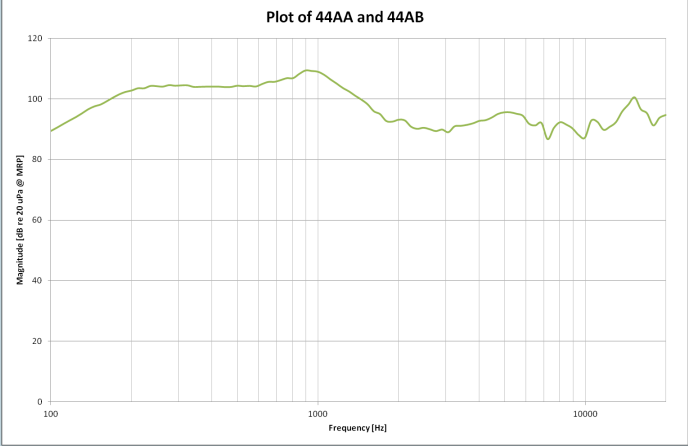
GRAS 44AA Mouth Simulator is a sound source which simulates the sound field around the human mouth at close quarters and complies with the Standards IEEE 269, 661 and ITU-T Rec. P51.

GRAS 44AA is for testing telephone mouthpieces as well as other microphones similarly used in communication networks.

At the mouth reference point (MRP), which is 25mm from the detachable lip ring (35mm from the mouth of the GRAS 44AA), the maximum continuous signal it can produce in 1/3-octave bands is 100dB re. 20μPa in the frequency range 100Hz to 16kHz. Its loudspeaker accepts an external signal either directly or via its own built-in power amplifier (when power is applied).

Jigs are included for calibration according to CCITT P.51 and IEEE 269. These are for use with 1/4" or 1/2" microphones. One jig holds the microphone at 0° incidence (1/4" only) to the sound source, the other at 90° incidence (1/4" or 1/2").



Connector type		BNC
ITU-T recommendations		P.51
IEEE standard		269, 661
Input impedance	k	20
Maximum power, continuous	W	10
Maximum power, pulsed 2 sec.	W	50
Temperature range, operation	°C / °F	10 to 35 / 50 to 95
Gain	dB	10
Input signal, max.	Vrms	2
CE/RoHS compliant/WEEE registered		Yes/Yes/Yes
Weight	g / oz	1050 / 37.038
Specification Conditions		<div><p>Built-in power amplifier</p><p>Maximum continuous output level at MRP [200 Hz - 6 kHz] 110 dB re. 20 Pa</p><p>Maximum continuous output level at MRP [100 Hz - 16 kHz] 100 dB re. 20 Pa</p><p>Distortion 250 Hz - 8 kHz (Linear signal @ 94 dB at MRP) typically 1 %, max. 1.5 %</p><p><b>Plot of 44AA and 44AB</b></p><p>Frequency response</p><p>GRAS Sound &amp; Vibration reserves the right to change specifications and accessories without notice.</p></div>

## Included

GRAS RA0104	Jig (CCITT P51)
GRAS RA0105	Jig (IEEE 269)

## Optional

GRAS RA0110	Conical mouthpiece
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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.

