SAM phantom



The SAM phantom (Specific Anthropomorphic Mannequin) developed by SATIMO is produced in accordance with the 3D-CAD files as specified in the standards and is delivered with a compliance certificate. It has been designed to fit the COMOSAR phantom tables and is delivered with a plastic cover to prevent liquid evaporation.



Product category

Phantom

Function

 Contains liquids that simulate human tissues (head and body) for SAR measurements

User profile

• SAR bench users

Related standard

 IEEE 1528; FCC OET Bulletin 65 (Ed. 97-01) supplement C; IEC 62209-1/ IEC 62209-2; EN 50361:2001

Related equipment

• COMOSAR table, positioning system

Compliant

As stipulated in the standards, the SAM phantom is made of low loss and low permittivity material. The material is resistant to Glycol and offers high rigidity (composite material based on fibreglass).

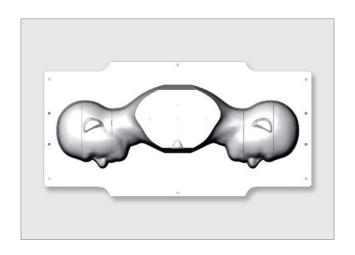
The low loss ear spacer provides spacing of 6 mm from the tissue boundary at the Ear Reference Point (ERP) within a tolerance of less than \pm 0.2 mm.

Easy and Precise Positioning

The SAM phantom has been designed so that positions can be easily reproduced. It includes reference points to position the DUT and probe. 4 reference points are available:

- one on the top part of the phantom to position the tip of the probe correctly.
- one in the centre of each of the phantom's parts (right head, left head and flat part).

In addition, the outside shell of the phantom includes a perpendicular cross-section (between the ear reference point and the mouth, as well as between the neck and the forehead). This cross-section is used as a reference to position the acoustic output of the device.



TWIN SAM phantom

Mechanical

Overall thickness	2 ± 0.2 mm (except ear area)
Dimensions	1000 mm (L) x 500 mm (W) x 200 mm (H)
Maximum volume	27 L
Material	Fiberglass based

Electrical

Relative permittivity	3.4
Loss tangent	0.02

