

# HETEROGENEOUS THERMOMETRY HEAD PHANTOM – 7T

## Description

The **Heterogeneous Thermometry Head Phantom** is a head sized ellipsoidal phantom with a spherical air cavity to mimic the nasal cavity.

The gel filled version reproduces B0 and B1+ heterogeneities similar to those encountered in the human head.

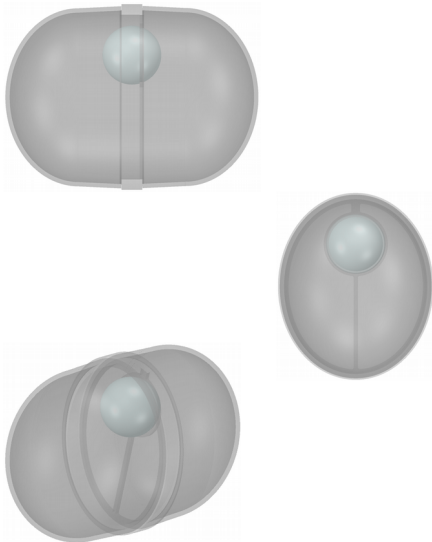
## Applications

The gel filled **Heterogeneous Thermometry Head Phantom** enables accurate thermometry measurements for RF validation purposes and SAR assessment.

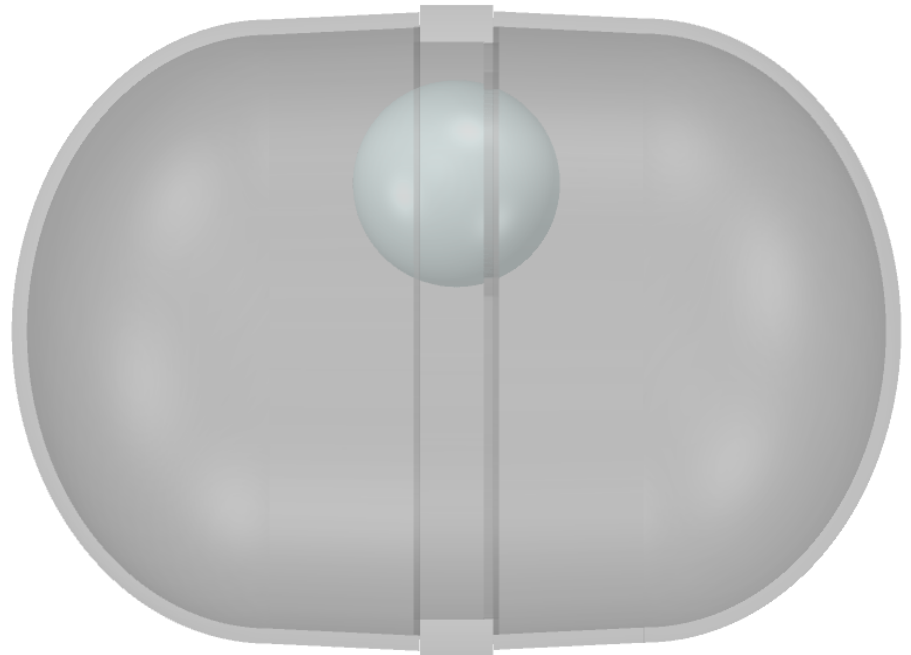
The empty version enables the customer to fill the phantom with their own phantom solutions.

## Warranty

Product is warranted during a period of one year. Repairs or replacements will be made free of charge for materials and labor.



Design and specifications subject to change without notice.  
Doc. #4-425-HTHP-7T, 01



## Specification, Model HTHP-7T-gel

+ Length/Width/Height	: 270/180/218 mm
+ Contents	: Gel base phantom solution to prevent thermal convection Air filled cavity
+ Relative permittivity	: 50
+ Electrical conductivity	: 0.6 S/m
+ Thermal conductivity	: 0.404 W/(m.K)
+ Volume heat capacity	: 3.430 MJ(m <sup>3</sup> .K)
+ Volume mass density	: 1050 kg/m <sup>3</sup>

## Note

This phantom is suitable for guiding the validation of simulated RF coil setups, however the measured temperature increases should not be taken as a surrogate for in-vivo tissue heating or SAR, which requires heterogeneous body models as well as the incorporation of thermoregulatory response mechanisms.

## Specification, Model HTHP-7T

+ Length/Width/Height	: 270/180/218 mm
+ Contents	: Empty, air filled cavity

**Please contact us for order information and a complete list of our products and system compatibilities.**

**MACH<sup>+</sup>NET**