

# Invenia ABUS Phantom

## Model ATS UC-551M



The ATS UC-551M, a modified version of the ATS Model 551 Small Parts Phantom, is designed for use with GE's Invenia ABUS scanner. The scan surface has a 17.5-inch radius of curvature, which matches the shape of the Invenia ABUS scan head.

The rubber-based tissue mimicking material has a sound velocity of 1450 m/sec and an attenuation of 0.5dB/cm/MHz at room temperature (23°C). To ensure measurement accuracy, CIRS incorporates a thermometer strip affixed to the outside surface of the phantom housing.

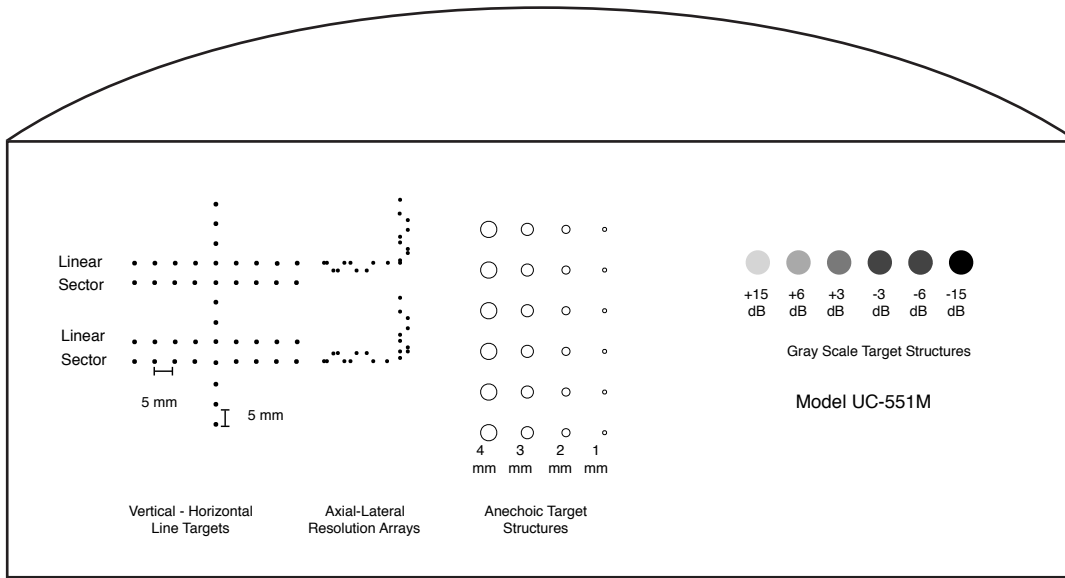
The phantom is packaged in a carrying case providing added protection during transporting and storage. GE-recommended QA test procedures for the Invenia ABUS and Invenia ABUS 2.0 scanners are provided in separate documents. All ATS urethane phantoms are guaranteed for the useful life of the phantom, defined as 10 years.

### Recommended Tests with Model ATS UC-551M

- Axial Measurement Accuracy
- Lateral Measurement Accuracy
- Axial and Lateral Resolution
- Contrast Resolution
- SNR: Signal to Noise Ratio

# CIRS

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**SPECIFICATIONS**

<b>DIMENSIONS</b>	28.5 x 12 x 10.6 cm (11" x 5" x 4")
<b>PHANTOM WEIGHT</b>	8 lbs. (3.6 kg)
<b>HOUSING MATERIALS</b>	PVC
<b>SCAN SURFACES</b>	1
<b>SCAN SURFACES DIMENSIONS</b>	26.7 cm x 10 cm Curved, radius of 44.50 cm (17.5")
<b>TISSUE-MIMICKING MATERIAL</b>	Urethane Rubber

**URETHANE PROPERTIES**

Freezing point: < -40°C  
 Melting point: Above 100° C  
 Speed of Sound: 1450 m/s at 23°  
 Attenuation Coefficient: 0.5 dB/cm/MHz (measured at 3.5 MHz)

**LINE TARGETS**

Material: Monofilament nylon

**VERTICAL DISTANCE GROUP**

Number of targets: 12  
 Depth range: 0.5 to 5.0 cm  
 Spacing: 0.5 cm

**HORIZONTAL DISTANCE GROUP**

Number of groups: 2  
 Depths Linear: 2.0 & 4.0 cm  
 Sector: 2.5 & 4.5 cm  
 Spacing: 0.5 cm

**MODEL ATS UC-551M INCLUDES**

QTY	COMPONENT DESCRIPTION
1	ABUS Phantom for Small Parts
-	10-Year Warranty
-	User Guide
-	GE QA Test Procedures
-	Certificate of Compliance

**AXIAL-LATERAL RESOLUTION GROUPS**

Number of targets: 2  
 Targets sets per depth: 10  
 Spacing: 0.25, 0.5, 1, 2, 3 mm  
 Depth: 2, 4.5 cm

**ANECHOIC STEPPED CYLINDERS**

Type: Non-echogenic, cylindrical  
 Number of Groups: 4  
 Number of targets: 6  
 Diameter: 1, 2, 3, 4 mm  
 Spacing: 1 cm center to center  
 Depth: 1 to 6 cm

**GRAY SCALE TARGETS**

Type: Echogenic, Cylindrical  
 Number of Targets: 6  
 Diameters: 6 mm  
 Spacing: 1 cm center to center  
 Depth: 2.0 cm  
 Contrast (dB): -15, -6, -3, +3, +6, +15

