

# Basic QA Phantom

## Model ATS 535H



The Model 535 rubber-based, tissue-mimicking (TM) phantom is designed to fulfill the basic testing requirements of a Quality Assurance Program.

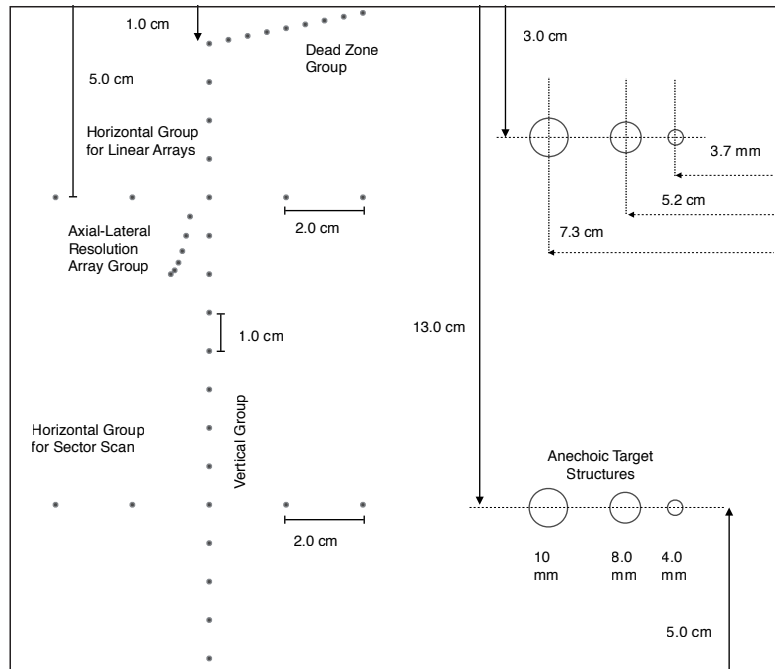
The phantom is designed with a combination of monofilament line targets and six tissue mimicking cylindrical targets of varying sizes. The monofilament line targets have a diameter of 0.12 mm, to optimize the displayed image at frequencies ranging from 2.25 to 7.5 MHz. Four groups of line targets are provided to evaluate the vertical and horizontal calibration measurements, axial-lateral resolution and the dead zone. All ATS urethane phantoms are guaranteed for the useful life of the phantom, defined as 10 years.

### Key Tests with Model ATS 535H

- Uniformity
- Depth of Penetration
- Beam Profile/ Focal Zone/ Lateral Response Width
- Vertical Distance Measurement
- Horizontal Distance Measurement
- Axial and Lateral Resolution
- Contrast Resolution
- Dead Zone Assessment

# CIRS

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**SPECIFICATIONS**

<b>DIMENSIONS</b>	23.4 x 20.9 x 9.5 cm (9" x 8" x 4")
<b>PHANTOM WEIGHT</b>	7 lbs. (3.1 kg)
<b>HOUSING MATERIALS</b>	PVC
<b>WALL THICKNESS</b>	1 cm
<b>SCAN SURFACES</b>	4
<b>SCAN SURFACES DIMENSIONS</b>	17.5 x cm 19 x 8 cm
<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  
 Diameter: 0.12 mm

**VERTICAL DISTANCE GROUP**

Number of targets: 17  
 Depth range: 1.0 - 17.0 cm  
 Spacing: 1 cm

**HORIZONTAL DISTANCE GROUP**

Number of groups: 2  
 Depths: 5 cm from Scanning Surface #1  
 5 cm from Scanning Surface #3  
 Number of Targets: 10  
 Spacing: 2 cm

**DEAD ZONE GROUP**

Number of targets: 9  
 Depth range: 2.0 - 10.0 mm  
 Lateral Displacement: 5 mm  
 Spacing: 1 mm

**MODEL ATS 535H INCLUDES**

QTY	COMPONENT DESCRIPTION
1	Basic QA Phantom
-	10-Year Warranty
-	User Guide
-	Certificate of Compliance

**AXIAL-LATERAL RESOLUTION GROUPS**

Number of targets: 6  
 Lateral Displacement: 1 mm  
 Spacing: 5, 4, 3, 2, 1 mm  
 Axial Depth: 5.5 & 11 cm  
 Lateral Depth: 4.5 & 16.5 cm

**ANECHOIC STEPPED CYLINDERS**

Type: Non-echogenic, cylindrical  
 Number of targets: 6  
 Diameter: 4, 8, 10 mm  
 Spacing: 1.0 cm  
 Depth: 3, 5, 13 cm

