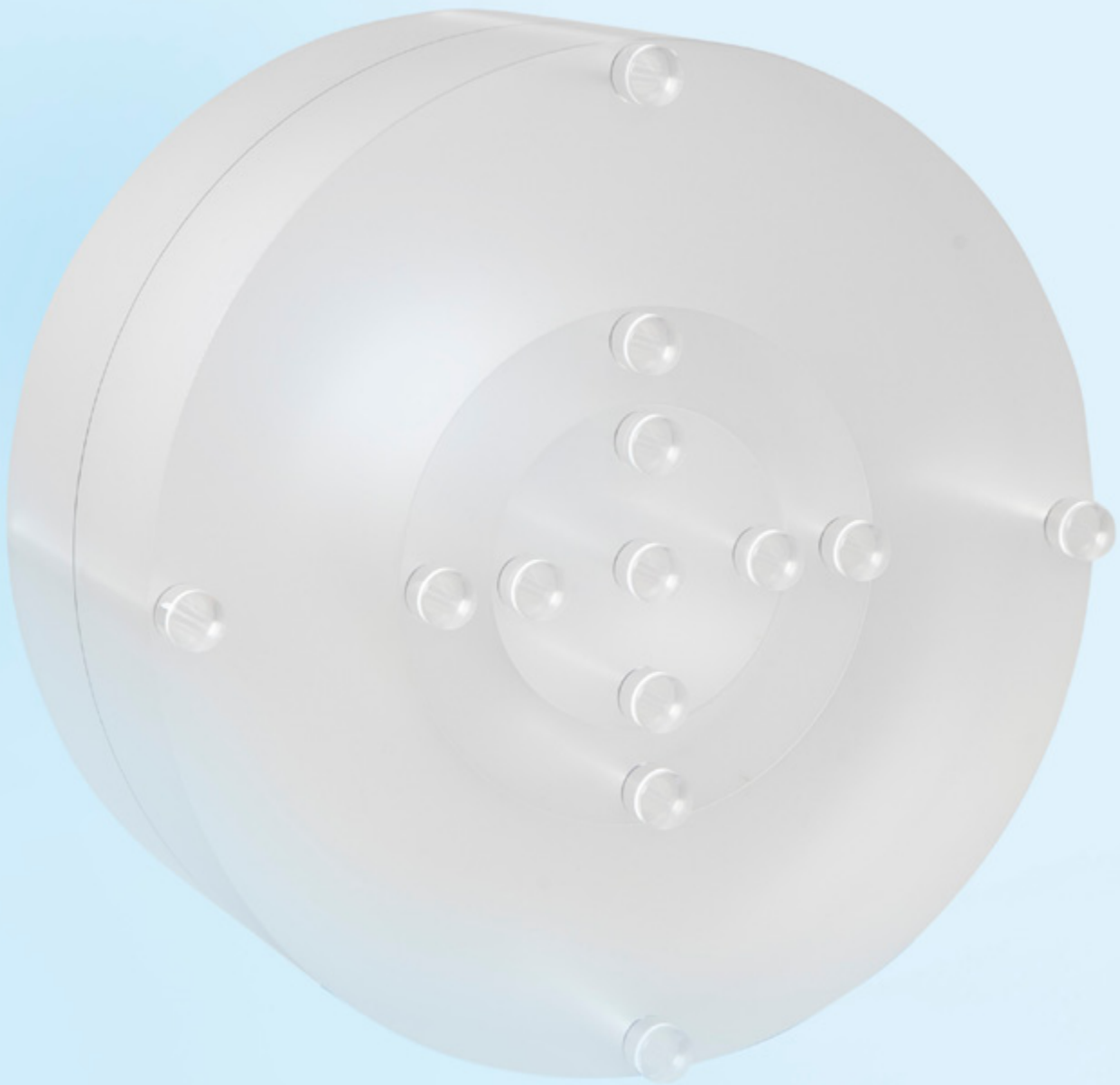


Nested CTDI Phantom

Phantom for CTDI Measurement



Nested Adult/Head/Pediatric Phantom

For CTDI Measurement using Ion Chambers in CT Applications

Equipment typically used to measure CTDI includes an electrometer featuring a 100-mm-long CTDI ion chamber and a CTDI phantom made of polymethylmethacrylate (PMMA).

The phantom is placed with its long axis perpendicular to the plane of the transverse CT scan and the ion chamber placed in one of the holes through the phantom. $CTDI_{100}$ is obtained by integrating the dose over 100 mm from a single transverse scan and dividing it by the nominal beam width.

The QUART CT Head/Body/Paediatric CTDI (Computed Tomography Dose Index) Phantom, enables the measurement of the approximate dose to the patient for a given series of scans.

The CTDI phantom is designed in accordance with DIN, IEC, FDA, NEMA, and other standards. It is specifically applied to CT systems. The phantom is available in nested configuration for a maximum in user flexibility.

The CTDI phantom can be used with any CT system and may be used to image and monitor adult head and body, as well as paediatric dose requirements. The phantom set consist of a group of head, body, and paediatric PMMA sections with five probe holes in each section. They are located in the phantom bodies according to the standard requirements. Acrylic rods are provided to seal the unused holes.

Features of the Test Phantom

- _ Adult Section – diameter: 320 mm, length: 150 mm
- _ Head/Paediatric Body Section – diameter: 160 mm, length: 150 mm
- _ Paediatric Head Section – diameter: 100 mm, length: 150 mm
- _ Each section contains 5 probe insert holes: $\varnothing 13.1$ mm.
 - Locations: 1 center, 4 peripheral, 10 mm from the respective edges.
 - CT probe holes can be sealed with adjoining acrylic rods when not in use.

Test Parameters

- _ $CTDI_{100}$ (centre + peripheral)
- _ $CTDI_w$ (weighted $CTDI_{100}$)
- _ $CTDI_{vol}$ (weighted $CTDI_w$)
- _ $CTDI_{free\ air}$

Included in the Delivery:

- ✓ Nested CTDI Phantom
- ✓ User Guide
- ✓ Transport Case (included)

Also Available:

- QUART *didoCT* or *didoCT+* Precision Meter for dose-length product measurement
- QUART *DVT_AP / CT_TEC* Image Quality Control Phantom and Automatic Image Quality Control Software (Set)

