



INDEPENDENT X-RAY  
QUALITY ASSURANCE

Use with

Piranha  Cobia



### RTI CT Ion Chamber General Specifications

## 10 cm Ionization Chamber for CTDI Measurements

The RTI CT Ion Chamber is a rugged, cylindrical pencil-shaped vented ionization chamber for CTDI measurements. The chamber is intended for measuring and monitoring the exposure output level of CT scanners in a phantom or free-in-air. CT dose index, CTDI, can be measured in accordance with IEC 61223-2-6. The CT ion chamber can be connected via RTI Chamber Adapter to the Piranha or to the Cobia.

### Reliable Dosimetry

The RTI CT Ion chamber has an outstanding energy linearity, within 0.5% in the range 70 - 150 kV for the IEC 61267 radiation qualities RQR 5 to 10, RQA 5 to 10, and RQT 8 to 10, and ISO N-150.

With an effective length that is very precise ( $100 \pm 0.5$  mm), dosimetry at wide beams when the chamber needs repositioning, becomes very accurate.

With the optional LoniMover the positioning becomes even more accurate and efficient.

The rubber O-rings make the positioning in the CTDI phantom safe and precise. The length of the chamber and the flat ends matches the edges of a 150 mm wide CTDI phantom for a perfect positioning, and no need of adapter to match the diameter of the holes.

### General Specifications

Art No	9730025-00
Connector type	LEMO triaxial
Cable	2 m, low noise triaxial
Active volume	5.3 cm <sup>3</sup>
Active length	100 mm
Diameter	12 mm, 12.6 incl O-rings
Typical leakage	$\pm 20$ fA
Radiation quality	70 - 150 kV
Sensitivity	30 mGycm/nC
Energy dependence	$\pm 1$ %

### with RTI Chamber Adapter

Air kerma rate	0.3 mGycm/s to 3 Gycm/s
Uncertainty	$\pm 5$ % or $\pm 0.03$ mGycm/s

Specifications in this document may be changed without notice

