

# The RTI Piranha family



## Powerful, wireless QA

All Piranhas meters have Bluetooth connection and are compliant with our powerful Ocean X-ray QA software.



INDEPENDENT X-RAY  
QUALITY ASSURANCE

# The RTI Piranha selection guide

## The premium platform for advanced, reliable QA

RTI's Piranha meters are divided into five main application groups - Multi, CT, Mammography, R/F, and Dental. The Piranha MULTI (657) can be used for X-ray QA of all modalities, whereas the other Piranhas are dedicated to one specific modality. All meters have Bluetooth connectivity and are compliant with our powerful Ocean software.

Piranha meters	MULTI (657)	R/F (557)	CT (455) CTD	CT (455) IC	MAMMO (355)	DENTAL (255)
Tablet compatible	•	•	•	•	•	•
Ocean software compatible	•	•	•	•	•	•
Waveform	•	•	•	•	•	•
Dose & Dose rate	•	•	•	•	•	•
Quick HVL	•	•	•	•	•	•
R/F	•	•				
Mammography	•				•	
Dental	•	•				•
CT	•	•	•	•		
kVp & Time	•	•	•	•	•	•
HVL & Total Filtration	•	•	•	•	•	•
RTI Dose Probe	•	•	•	•	•	•
RTI CT Dose Profiler	•	•	•	•	•	•
RTI Mas-1, Mas-2, & Light Probe	•	•	•	•	•	•
RTI CT Ion Chamber	•	•	•	•	•	•

• Standard function    • Optional

R/Fxa..... Meters for radiography and fluoroscopy.

Mammography ..... Meters for mammography.

CT ..... Meters for CT.

Dental ..... Meters for dental (intraoral, panoramic and CBCT).

kVp & Time..... The meter measures kVp & time for supported modality.

HVL / Total Filtration... The meter measures HVL and total filtration using internal filters.

Dose & Dose Rate ..... The meter measures dose and dose rate.

Waveform ..... The meter can show kV and dose rate waveforms.

Dose Probe ..... Useful when higher sensitivity and minimal perturbation of field are required.

CT Dose Profiler ..... For CT dose profile measurement.

Ion Chamber..... RTI Chamber Adapter is required.

*Specifications in this guide may be changed without notice.*

**Piranha CT (455)/CTDP**

**Piranha CT (455)/IC**



**Piranha R/F (557)**



**Piranha MULTI (657)**



**Piranha MAMMO (355)**



**Piranha DENTAL (255)**

# Premium platform for advanced QA

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## **Ocean software compatible**

Everything happens in a flash! The Piranha is quick, Ocean software is quick, and therefore your daily QA work will go quickly. Ocean can perform instant real-time analysis during your measurements. Ocean also prepares a report in the background as you go. So when the work is done, if you want a complete report of your work – just press print!

Use your tablet/laptop as both an interactive display during the measurements and as a powerful analysis tool when you are back at the office. All your measurements, along with the result and the report will be stored inside your tablet or laptop. No unnecessary, time-consuming data transfer at the end of the day.

## **Plug n play**

The Quick Check can almost feel what you are about to do; it identifies your probe and selects the optimum Piranha settings for your measurements. Everything happens automatically – just “Plug n Play”. It can also be programmed to always start with the kind of set up that you usually start your QA work with.

*Let the Piranha do the work for you!*

## **Piranha never forgets**

During the measurements you will only see the desired values on your tablet or laptop but since the Piranha continues to work behind the scenes, you always have access to all of the data from each measurement.

This enables you to perform for instance trend analysis and study the history of each X-ray equipment – even months after you have completed your measurements.



A 10" Tablet PC, displaying Ocean Quick Check, and Piranha meter with Bluetooth connection.



# The Piranha family

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## A ready-to-use, complete QA solution

The Piranha comes ready-to-use with everything you need included. It is really an all-in-one multifunction meter. Connect to your computer wireless or via USB, and you have a complete QA system!

The number of Piranha meters available ensures that you only pay for what you need. As your needs grow, you have unlimited ability to upgrade your Piranha. Check the Service section on our website for more details.

## Position Check function

The Piranha has a unique feature that makes it possible to check the position of the detector before measuring. By using the “Position Check” function, you can verify that the detector area is fully irradiated. Possible field inhomogeneities are also neutralized.

### Piranha Key Features

- All-in-one multifunction X-ray meter
- One-shot HVL for Mammography, Radiography, CT, and Dental
- Solid-state detectors = no need to compensate for temperature & pressure
- Can measure on scanning beams as well as tomosynthesis
- Optimized for X-ray equipment from a large number of manufacturers
- Built-in energy compensation
- Can be used together with ion chambers
- Wide-range detection of total filtration
- 100 meters Bluetooth range
- Unique detector design to minimize position and rotation dependence
- Automatic recognition of external probes
- Small, compact, and robust – easy to place
- Backscatter protected
- Long-lasting rechargeable battery
- Lead free
- Always free firmware upgrades
- Software easily updated via Internet or in house
- Upgrades available
- Up to 10-year warranty
- Two-year Calibration Cycle

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## Piranha MULTI (657) - complete X-ray Quality Control

The Piranha MULTI is all you need for qualified diagnostics and QA on radiography, fluoroscopy, CT, dental, and mammography X-ray scans.

It measures and presents all parameters instantly and simultaneously. A compact solution for fast and reliable testing!



RTI Dose Probe



CT Dose Profiler

# Ocean software for X-ray QA

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## Market-leading software

Ocean, the market-leading software for X-ray QA, addresses customers needs all the way from easy-to-use Quick Check, for daily checks, to advanced QA with workflow, automation, and tracability in Professional. The Ocean software suite is central to RTI's X-ray solutions and is compliant with all our product lines.

By using Ocean you can plan the measurements at your desk in advance, create checklists, add information as a pop-up window for a specific exposure and include instructions to simplify the work for you and your co-workers.

Waveforms can be studied immediately and setup by simply placing your meter under the X-ray beam, making an exposure and seeing the results instantaneously. The measured data can automatically be captured in your customized Ocean database or transferred into your current Excel® worksheets.

When connecting the Piranha and Ocean using Bluetooth, Ocean performs auto-search/pairing to speed up and secure the Bluetooth communication.

## Connect/Quick Check

Ocean Quick Check lets you start measuring within seconds. The application detects what instrument and probes you have connected to assist you the best way possible – just “Plug n Play”. The interface adapts and all the measured parameters are displayed on one screen. The results and waveforms can be retained in the database for later review and compiled in a report.





# Ocean software for X-ray QA

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## Professional

Ocean Professional is a very powerful application for customized and advanced analysis of X-ray QA.

To become really efficient, but also to assure compliance and traceability, you simply implement your QA process in Ocean.

Using the powerful Ocean “templates” feature, you can build your QA exactly the way you want it, e.g., predefined workflows, automation of steps graphs, trend analysis, etc., all with full traceability. The report can be customized with your own logo and own layout. Comments and pictures can also be added.

Which Ocean version suits you the best?	Connect/Quick Check	Professional
Connect/Quick Check function	•	•
Get started quickly	•	•
Perform simple and accurate measurements, display data and waveforms	•	•
Print out customized reports	•	•
Working with a flexible layout	•	•
Store your measurement set-up as a favorite which is displayed when you start Ocean next time	•	•
Add columns with “Set Values” (for automatic adjustments of the kV range)	•	•
Be able to export measurements to Excel®	•	•
Have the possibility to re-measure previously stored measurements	•	•
Use CT Dose Profiler templates		•
Customize your CT Dose Profile measurements		•
Get an easy overview of the entire organization		•
Possible to apply different analysis to measured data in a very flexible fashion		•
Add calculations which use the measured data as input		•

# Service & Warranty

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Since its establishment in 1981, RTI Group has been delivering world-leading X-ray QA “solutions” of meters and probes.

## Two-year calibration cycle

Due to the high reliability of RTI products, we recommend a two-year calibration cycle. To make it convenient for you, we offer to keep track of when your solution needs to be sent in for calibration. We will send you a reminder two months before your calibration is due, giving you time to plan and schedule your work.



RTI is proud of its ISO/IEC 17025:2017 accreditation – “General requirements for the competence of testing and calibration laboratories”. This is a guarantee that we comply with obligations under the international standards, and that we have a quality management system in place to assure that the calibrations we perform are of the highest quality - each and every time.

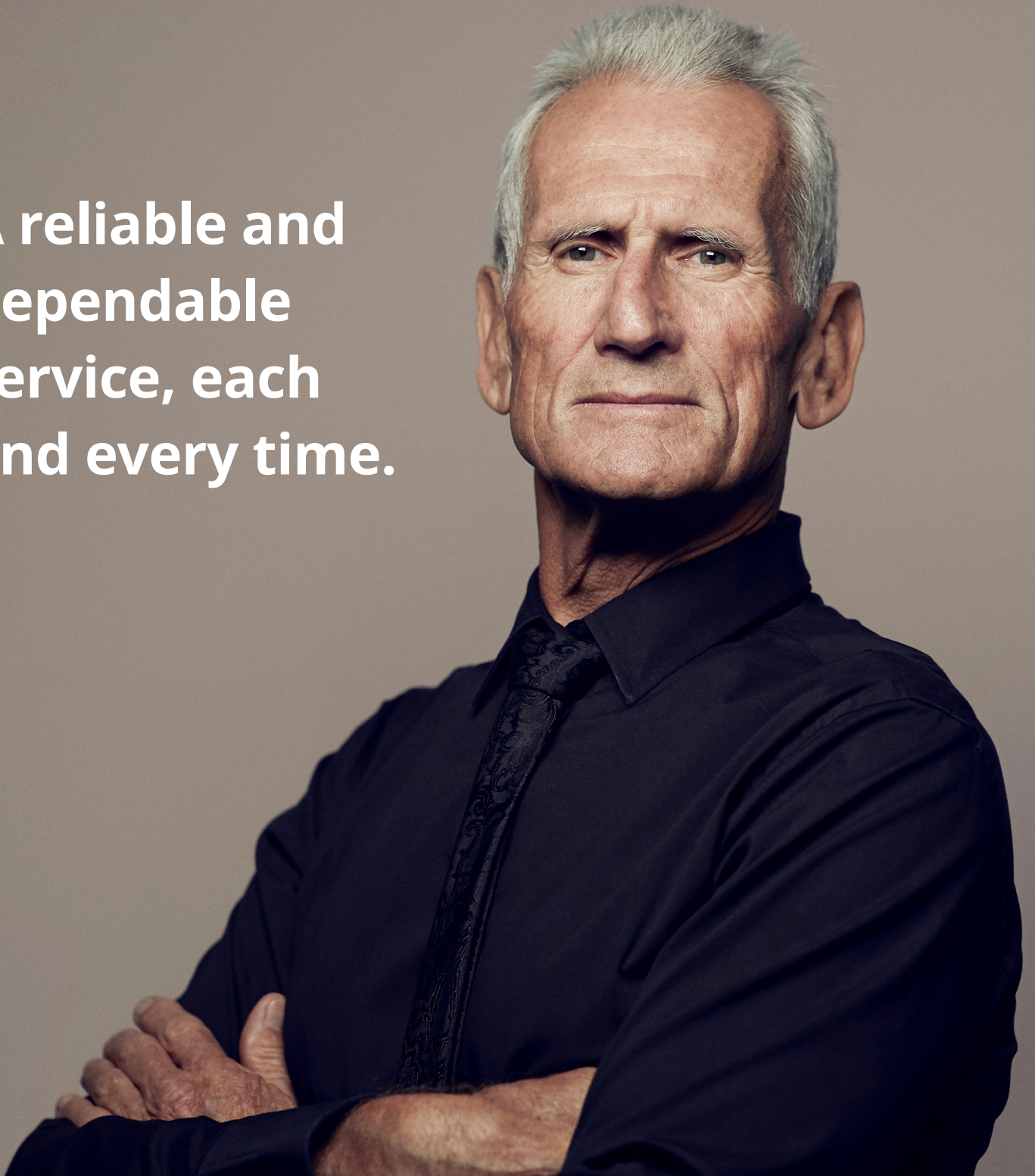


The RTI conditional Extended Warranty program, for the Piranha, gives you up to 10-year warranty. Each instrument comes with a two-year warranty. By joining the Extended Warranty Program, you can increase your warranty two years at a time – up to 10 years.

## Let's work together

At our accredited calibration labs, your solution is in the best hands. Trained RTI service engineers take the very best care of your meter(s) and probes, making sure they perform better for longer. As an owner and user of any RTI solution, you are guaranteed to always receive prompt and professional support if and when required.

**A reliable and  
dependable  
service, each  
and every time.**



# Piranha cases & accessories

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## Piranha Premium Outdoor Case

A waterproof case, made with a rugged, high impact polypropylene exterior. Inside, it has many of the same design features as the Piranha Premium Case. The Piranha, and any desired accessories, are stored in two convenient and compact layers.

Art.No .....9742005-00



## Piranha Premium ALU Case

This light-weight, aluminium case is not only attractive, but also just “the right size” to provide space for the Piranha and all its accessories included in the popular Piranha Premium Kits.

Art.No .....9742006-04



## Soft Shell Case

A perfect solution for storing your Cobia or Piranha meter. Along with power supply, tablet and a couple of probes, your QA solution fits perfectly into this case.

Art. No .....9742008-00



## RTI Chamber Adapter

External module for connecting ion and DAP chambers to RTI meters. Supports ion chambers with LEMO triaxial connectors. A measuring range of 10 pA – 0.7  $\mu$ A.

Art. No .....9730016-00

# Piranha accessories

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## RTI Dose Probe

The dose probe is intended for low dose rate measurements, such as input dose rate to image intensifiers.

Art. No .....9730003-00



## RTI T20 Dose Detector

A solid-state detector, dedicated for measurements on R/F systems when it is crucial that the detector itself does not have any effect on the system output or disturbs the X-ray beam. Despite its small size, it is protected from picking up backscatter.

Art. No .....9730015-00



## RTI CT Dose Profiler

A pioneer at measuring CT. The RTI Dose CT Dose Profiler is used for evaluation of CT and CBCT systems. It is robust and fits into existing standard phantoms used for CTDI measurements.

Art. No .....9730013-00



## RTI MAS-1

The MAS-1 Probe is an invasive probe for the measurement of mA and mAs. Direct readings of mA and mAs, as well as waveform, are obtained. The simple way of invasive measurements.

Art. No .....9730005-00



# Piranha accessories

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## RTI MAS-2

The MAS-2 Probe is a clamp-on probe for non-invasive measurement of mA and mAs. The major advantages are that the probe is easy to use and safe. No connection inside the X-ray generator is needed. The simple way of non-invasive measurements.

Art. No .....9730006-00



## RTI CT Ion Chamber 10 (top) & 30 cm

The RTI CT Ion Chamber is a rugged, cylindrical pencil-shaped vented ionization chamber. The 10 cm is intended for measuring and monitoring the exposure output level of CT scanners in a phantom or free-in-air. The 30 cm for CTDI measurement when the beam width is 4 cm or wider.

10 cm Art. No .....9730025-00

30 cm Art. No .....9730026-00



## RTI Light Probe

Light probe for brightness measurements (luminance) on monitors and film viewing boxes as well as measurements of ambient light (illuminance) in the viewing room.

Art. No .....9730007-00



## Piranha Panoramic Holder/Vertical Holder v.4

This holder is designed for attaching the Piranha to dental panoramic equipment or vertical mounting. It can be mounted with an adjustable strap or magnets.

Art. No .....9744007-00

## Piranha accessories

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### **Ion Chamber Magna 1 cc**

The Magna 1cc ionisation chamber is designed for mammography dose measurement. It has an excellent energy response, and this is why it can be used for radiographic applications too.

Art. No .....9706100-00



### **RTI LoniMover™**

The RTI LoniMover™ is the perfect tool to help you with accurate and reproducible measurements on your Cone Beam CT. Works both with a Pencil Ion Chamber or a CT Dose Profiler. Comes with LoniCT software, and operates simultaneously with RTI Ocean software.

Art. No .....9730030-00

# c/o RTI

What we do matters. To patients. To professionals. To us.

It is more than algorithms, technology and design.

It is about setting the standard for quality assurance  
of X-ray imaging.



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