# The RTI Cobia family



## Convenient, wireless QA

Cobia is RTI's easy-to-use product platform, tailored for different modalities and job situations.

All Cobias offer quick and efficient measurements and have Ocean™ connection.



## The Cobia family

### Cobia SMART R/F

A simple-to-use meter for checking that the output from an X-ray tube is correct.

For measurements of kV, dose, dose rate, time, TF, and HVL on conventional radiography and fluoroscopy. It can be used on dental intraoral X-ray tubes and CBCT as well.

### Cobia FLEX R/F

Amazingly easy to use and ideal for straightforward routine inspections.

For measurements of kV, dose, dose rate, time, HVL, and TF on conventional radiography and fluoroscopy. It can be used on dental intraoral X-ray tubes & CBCT as well.

The Cobia FLEX R/F can be connected to all RTI probes available (such as dose probes, CT probes, mAs probes, and light probes).

### **Cobia SENSE**

A convenient way to make the regular constancy checks of your X-ray equipment as quick and as accurate as possible.

Cobia SENSE is dedicated for use with an external detector such as the RTI Dose Probe, RTI Light Probe, RTI CT Ion Chamber, or external mAs probes. The wide selection of external probes enables a big flexibility in the performance of regular constancy checks for most modalities.

### **Cobia DENTAL**

The first choice for fast and easy Intraoral and CBCT system testing, service, and maintenance.

For measurements of TF, kV, dose, dose rate, time, and HVL on dental intraoral X-ray tubes as well as CBCT. Especially suitable for acceptance/constancy tests and routine inspections.

## Cobia SMART R/F



## Cobia FLEX R/F









**Cobia DENTAL** 

## Cobia SMART R/F

The Cobia SMART R/F is a simple-to-use meter for checking that the output from an X-ray tube is correct.

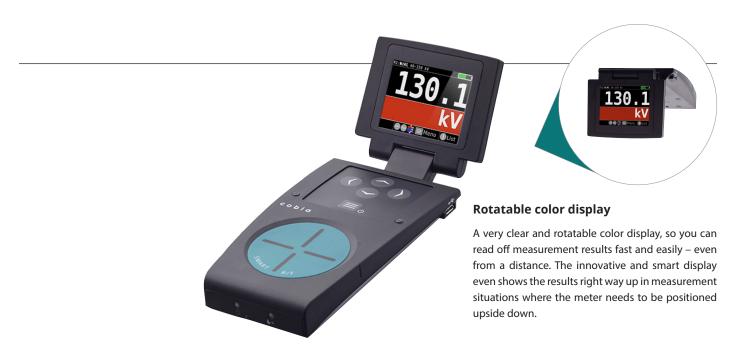
Place it beneath the X-ray tube, take an X-ray exposure, and instantly get an accurate reading. The measured values can be read directly from the large and clear display, and stored in the meter to read later.

### **Check and Go**

Cobia SMART R/F is perfect for anyone wanting to ensure that an X-ray device is functioning as it should. For example, it is ideal for checking fast and often that the kV and/or dose are not changing over time.

### **Different languages**

As well as English, you can choose to run your meter in several languages such as Chinese, French, German, Japanese, Norwegian, Russian, Spanish, Swedish, and Turkish. These can easily be selected via the Cobia menu, and we constantly update with more languages.



Cobia SMART R/F	
Weight Approx	290 g
Size	138 x 76 x 27 mm <sup>3</sup>
Power source	Int. battery / ext. power
Battery life	10 – 20 hours
Display	Color, 320x240 pixel

Measuring parameters		
	Range	Inaccuracy
Tube voltage	35 – 155 kVp	±2 %
Time	0 ms – 9999 s	±1 % or ±0.33 ms
	3 – 9999 pulses	
Min. exp. time	0.1 ms	
Sensitivity	0.2 mA @ 50 kV, 50 cm	
Dose	70 nGy–1700 Gy	±5 %
	8 μR – 200 kR	±5 %
Dose rate	2.5 μGy/s – 175 mGy/s	±5 % or ±200 nGy/s
	0.3 mR/s – 20 R/s	±5 % or ±2 μR/s
	17 mR/min–1200 R/min	±5 % or ±0.1 mR/min
	1 R/h – 70 kR/h	±5 % or ±70 mR/h
HVL	1.2 – 14 mm Al	±10 % or ±0.2 mm
<b>Total Filtration</b>	1.0 – 90 mm Al	±10 % or ±0.3 mm Al
Pulse frequency	1/6 – 260 Hz	±1 % or ±0.2 Hz
Dose/Pulse	10 nGy/p – 600 mGy/p	±5 %
	1.1 μR/p – 66 R/p	±5 %

## Cobia FLEX R/F

The Cobia FLEX R/F offers you the convenience to make your X-ray Quality Control as quick and accurate as possible. It is just as easy as the Cobia SMART R/F but with even more possibilities.

It has an internal detector, a detector input that offers the ability to connect different probes and ion chambers, and an optional built-in mAs. The measured values can be read directly from the large and clear display, and stored in the meter to read later.

### **Built to suit your needs**

Cobia FLEX R/F - for measurements of kV, dose, dose rate, time, HVL, and TF on conventional radiography and fluoroscopy. It can be used on dental intraoral X-ray tubes and CBCT as well. Our selection of external probes gives you several opportunities to make the Cobia Flex suit your specific needs – just plug in, and the Flex will adapt automatically.

### **Different languages**

As well as English, you can choose to run your meter in several languages such as Chinese, French, German, Japanese, Norwegian, Russian, Spanish, Swedish, and Turkish. These can easily be selected via the Cobia menu, and we constantly update with more languages.

Cobia FLEX R/F Art. No:		762003-00
Cobia FLEX R/F w. mAs Art. No:	97	62004-00



Cobia FLEX R/F	
Weight Approx	290 g
Size	138 x 76 x 27 mm <sup>3</sup>
Power source	Int. battery / ext. power supply
Battery life	10 – 20 hours
Display	Color, 320x240 pixel

Measuring parameters		
	Range	Inaccuracy
Tube voltage	35 – 155 kVp	±2 %
Time	0 ms – 9999 s	±1 % or ±0.33 ms
	3 – 9999 pulses	
Min. exp. time	0.1 ms	
Sensitivity	0.2 mA @ 50 kV, 50 cm (3 mm	n Al)
Dose	70 nGy–1700 Gy	±5 %
	8 μR – 200 kR	±5 %
Dose rate	2.5 μGy/s – 175 mGy/s	±5 % or ±25 nGy/s
	0.3 mR/s – 20 R/s	±5 % or ±2.5 μR/s
	17 mR/min–1200 R/min	±5 % or ±0.15 mR/min
	1 R/h – 70 kR/h	±5 % or ±0.9 mR/h
HVL	1.2 – 14 mm Al	±10 % or ±0.2 mm
Total Filtration	1.0 – 90 mm Al	±10 % or ±0.3 mm Al
Pulse frequency	1/6 – 260 Hz	±1 % or ±0.2 Hz
Dose/Pulse	10 nGy/p – 1 Gy/p	±5 %
	1.1 μR/p – 120 R/p	±5 %

## **Cobia DENTAL**

A simple-to-use meter for routine inspection of intraoral and CBCT X-ray equipment in dental clinics. Especially suitable for acceptance tests, constancy tests, and routine quality control.

Since the Cobia is so easy to position and doesn't require any complicated settings, anyone who works in the dental clinic can quickly and easily perform the routine inspection of the intraoral X-ray equipment. To determine patient safety – every day.

The measured values can be read directly from the large and clear display, and stored in the meter to read later.

Our Cobia DENTAL solution is the first choice for fast and easy Intraoral and CBCT system testing, service, and maintenance.

### **Different languages**

As well as English, you can choose to run your meter in several languages such as Chinese, French, German, Japanese, Norwegian, Russian, Spanish, Swedish, and Turkish. These can easily be selected via the Cobia menu, and we constantly update with more languages.

Cobia DENTAL Art. No:	9764003	-00
Cobia DENTAL kV & Dose + External input Art. No:	9764013	-00
Cobia DENTAL kV & Dose + mAs + External input Art. No:	9764014	-00



147 . 1 . 4	000					
Weight Approx	290 g		Range	Inaccuracy		
Size	138 x 76 x 27 mm <sup>3</sup>	Tube voltage	45 – 125 kVp	±2 %		
Power source	Int. battery / ext. power supply	Time	0 ms – 9999 s	±1 % or ±0.33 ms		
Battery life	10 – 20 hours		3 – 9999 pulses			
Display	Color, 320x240 pixel	Min. exp. time	0.1 ms			
		Sensitivity	0.2 mA @ 50 kV, 50 cm (3 mm	3 mm Al)		
		Dose	70 nGy–1700 Gy	±5 %		
			8 μR – 200 kR	±5 %		
		Dose rate	2.5 μGy/s – 175 mGy/s	±5 % or ±200 nGy/s		
			0.3 mR/s – 20 R/s	±5 % or ±2 μR/s		
			17 mR/min–1200 R/min	±5 % or ±0.1 mR/min		
			1 R/h – 70 kR/h	±5 % or ±70 mR/h		
		HVL	1.2 – 14 mm Al	±10 % or ±0.2 mm		
		Total Filtration	1.0 – 90 mm Al	±10 % or ±0.3 mm Al		
		Pulse frequency	1/6 – 260 Hz	±1 % or ±0.2 Hz		
		Dose/Pulse	10 nGy/p – 1 Gy/p	±5 %		

## **Cobia SENSE**

The Cobia SENSE offers you a convenient way to make the regular constancy checks of your X-ray equipment as quick and as accurate as possible.

It offers the ability to connect different probes and ion chambers, thereby enabling measurement in a wide variety of situations. The measured values can be read directly from the large and clear display, and are stored in the meter for later viewing.

The Sense is dedicated for use with an external detector, such as the DAP Chamber, RTI Dose Probe, RTI Light Probe, RTI CT Ion Chamber, or external mAs probes.

### Plug n Play

Thanks to the "Plug n Play" functionality, the Cobia SENSE will automatically recognize the different detectors you connect and instantly be ready for your measurements. This, together with the easy-to-read display, is why the it is also the perfect tool for untrained users.

### **Different languages**

As well as English, you can choose to run your meter in several languages such as Chinese, French, German, Japanese, Norwegian, Russian, Spanish, Swedish, and Turkish. These can easily be selected via the Cobia menu, and we constantly update with more languages.

Cobia SENSE R/F w. RTI Dose Probe Art. No:	9763002-00
Cobia SENSE Mammo w. RTI Dose Probe Art. No:	9763002-01
Cobia SENSE w. RTI CT Dose Profiler Art. No:	9763003-00
Cobia SENSE w RTI CT Ion Chamber Art. No:	9763005-00



Cobia SENSE		Measuring parameters	
Weight Approx	290 g	See respective external detector	
Size	138 x 76 x 27 mm <sup>3</sup>		
Power source	Int. battery / ext. power supply		
Battery life	10 – 20 hours		
Display	Color, 320x240 pixel		

## The RTI Cobia selection guide

Specifications in this guide may be changed without notice.

	Cobia SMART R/F	Cobia I	FLEX R/F		Examples of	Cobia SENSE		Cobia DENTA
Available models	kV & Dose	R/F	w. mAs	R/F	Mammo	CTDP	CT IC	DENTAL
Mammography	NO	EXT	EXT	EXT	Х	EXT	EXT	NO
Rad & Fluoro	X	Х	Χ	Χ	EXT	EXT	EXT	NO
Dental	Х	Χ	Χ	Χ	EXT	EXT	EXT	Х
CT	NO	EXT	EXT	EXT	EXT	X	Χ	NO
kV	INT	INT	INT	NO	NO	NO	NO	Х
Time	INT	I/E	ALL	Χ	Х	X	Х	Х
Dose	INT	I/E	I/E	Χ	Х	(CTDI)	(CTDI)	Х
Dose Rate	INT	I/E	I/E	Χ	Χ	NO	NO	Χ
HVL	INT	INT	INT	Χ	Х	NO	NO	X
Total Filtration	INT	INT	INT	Χ	Χ	NO	NO	Χ
# Pulses	INT	I/E	ALL	Χ	Χ	NO	NO	Χ
Pulse Rate	INT	I/E	I/E	Χ	Χ	NO	NO	Χ
Dose/Pulse	INT	I/E	I/E	Χ	Χ	NO	NO	Χ
Effective time	INT	I/E	ALL	Χ	Х	NO	NO	Χ
Internal mAs	NO	NO	Χ	NO	NO	NO	NO	OPT
Ocean™ compatibility	Χ	Χ	Χ	Χ	Χ	X	Χ	X
OCP	Χ	Χ	Χ	Χ	Χ	X	Χ	Х
Bluetooth connection	Х	Χ	Χ	Χ	Х	Х	Χ	Х
RTI Soft Shell Case	X	Χ	Χ	Χ	Χ	X	Χ	Χ
Dose Probe	NO	OPT	OPT	Χ	Χ	OPT	OPT	OPT
Mas-1	NO	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Mas-2	NO	OPT	OPT	NO	NO	NO	NO	OPT
CTDP	NO	OPT	OPT	OPT	OPT	X	OPT	OPT
CT Ion Chamber	NO	OPT	OPT	OPT	OPT	OPT	Χ	OPT
Light Probe	NO	OPT	OPT	OPT	OPT	OPT	OPT	OPT
DAP Chamber	NO	OPT	OPT	OPT	OPT	OPT	OPT	OPT

X = Included or possible INT = With internal detector (only) NO = Not possible OPT = Optional EXT = Extra probe/cal. of probe needs to be purchased \*MAS-2 cannot be used with Cobia SENSE I/E = Internal or External, or Internal mAs

Rad & Fluoro	Meters for radiography and fluoroscopy.
	Meters for mammography (not kVp).
5 . ,	
CT	
Dental	Meters for dental (intraoral or CBCT).
OCP	Open Communication Protocol.

Dose Probe	Useful when higher sensitivity and minimal perturbation of field are required.
CTDP	CT Dose Profiler for CT dose profile measurement.
CTDI	CTDI parameters.
CT Ion Chamber	To acquire all standard CTDI parameters.

## Ocean Next™ - the new power in X-ray QA software



### The power of the ocean - on your laptop

The importance of dedicated software applications to conduct professional QA is growing. Excel is flexible but simply not enough to meet the demands for traceability, compliance, and efficiency.

Since its launch in 2014, Ocean<sup>™</sup> has been <u>the</u> market-leading software for X-ray QA, addressing customers' needs all the way from Quick, for daily checks, to advanced QA with workflow, automation, and traceability in Professional in easy steps.\*

If you want a swift, easy-to-use application for routine controls, or a customized application with workflow, automatic tests, and traceability, the new Ocean Next™ software suite provides you with both options.

The software's recognition and efficiency make it central to our X-ray solutions, and it is compliant with all our Piranha and Cobia meters as well as the new Scatter Probe.

You can plan the measurements 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 using a streamlined user interface.

Choose from three different license levels: Quick, Advantage, and Professional.

### Quick

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 Next™ - the new power in X-ray QA software

### **Advantage**

For more advanced QA measurements than Quick, the Advantage license enables customization of templates to suit your specific needs. Predefined workflows, automation of steps, and graphs. In the Studio View, you can design single-page templates (including analysis and checklists) and important reports, e.g. with your own logo and own layout.

### **Professional**

For trend analysis and full traceability of your measurements. Ocean Next Professional allows you to build a holistic solution for your X-ray QA, by storing your measurements in a searchable database structured to your individual needs. The archived measurements are available for quick and intuitive retrieval.

Which Ocean Next™ suits you best?	Quick	Advantage	Professional
Built-in display function		•	
Save function		•	•
Basic report printing		•	•
Basic Excel connection		•	•
Advanced report printing		•	•
Advanced Excel connection		•	•
User-defined tests & checklists		•	•
Analysis with pass/fail limits		•	•
Reporting		-	-
CT Dose Profiler support			
Single-page templates		•	•
Multi-page templates			•
Site database			•

<sup>\*</sup>Ocean™ 2014 software is still available to download from the RTI website.

https://rtigroup.com/support/rti-software-download-center/

## **Service & Warranty**

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.



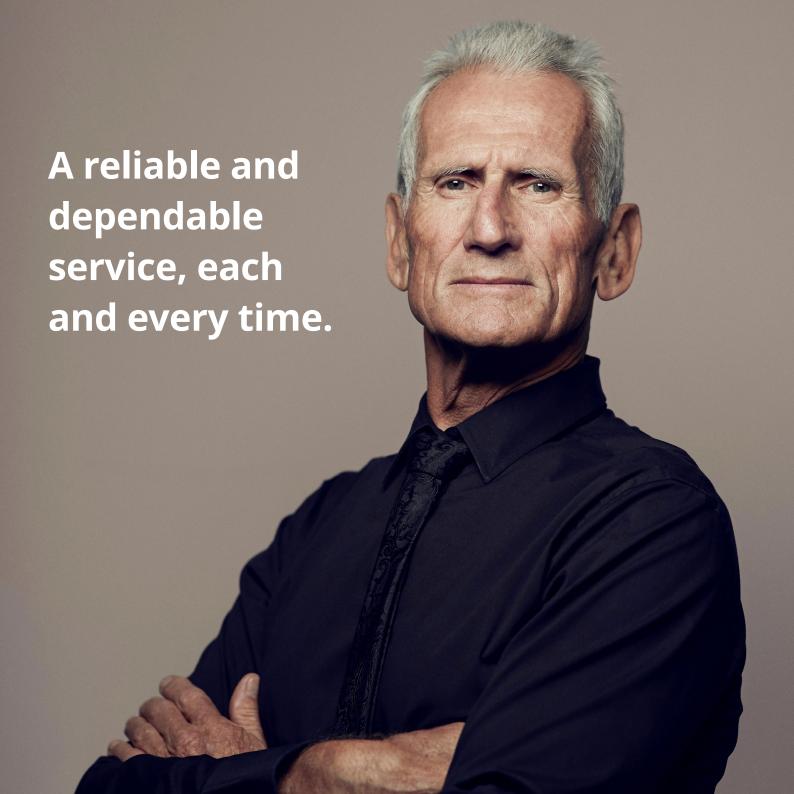
RTI is proud of its ISO/IEC 17025:2017 accreditation – "General requirements for the competence of testing and calibration laboratories". This is a guarantee that we comply with obligations under the international standards, and that we have a quality management system in place to assure that the calibrations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



The RTI conditional Extended Warranty program, for the Piranha, gives you up to ten-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 ten years.

## Let's work together

At our accredited calibration labs, your solution is always 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.







#### **RTI Dose Probe**

The dose probe is intended for low dose rate measurements, such as input dose rate to image intensifiers. Dose/pulse (for Dose Probe with Cobia): 1 nGy/p - 3 kGy/p.

#### **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.



#### **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.





#### **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.



### 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 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 –  $0.7 \, \mu A$ .



#### **RTI Scatter Probe**

A revolution within scatter detection. A rugged, flat, solid-state detector for leakage and scatter detection in X-ray environments. Its unique design - two separate detector areas of 10 and 100 cm<sup>2</sup> - fulfills current regulations and standards for X-ray leakage and scatter measurements.



#### DAP Chamber - 86x86 mm & 147x147 mm

The DAP Chamber is the essential accessory for your dental X-ray QA kit. It is the perfect tool for field calibration. You can measure with just one click – fast, easy, and accurate.

DAP Chamber 86x86 mm Art. No	9705070-00
DAP Chamber 147x147 mm Art. No	9705060-00





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.



### **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.



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

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



#### **Cobia Vertical Holder**

The Cobia Vertical Holder is designed for attaching the Cobia to vertical surfaces like a wall bucky, or Cone Beam X-ray units. It comes with an adjustable strap, with suction cup, for safe mounting.







#### RTI LoniMover™

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. Included LoniCT software works stand alone with an RTI Cobia FLEX or Cobia SENSE to record measured data.

### **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.

# 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.

