RTI | From Radiation to Information

Cobia SENSE

Cobia Sense – Sensible X-ray Constancy Checks

The Cobia Sense offers you the convenience to make the regular constancy checks of your X-ray equipment as quick and as accurate as possible.
The Cobia Sense 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 Cobia Sense for later viewing.

SENSIBLE CONSTANCY CHECKS

Cobia Sense is dedicated for use with an external detector such as RTI Dose Probe, Light Probe, 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.

As the newest member of the Cobia family, Cobia Sense has the same form factor and large display which features the Cobia's familiar and easy-to-navigate menu structure. The Cobia Sense is targeted for routine constancy checks, with the ambition to make those tasks quick and easy.

LONG CALIBRATION CYCLE

Cobia Sense comes with a 2-year factory warranty, and a recommended 2-year calibration cycle. This improves the utility ratio, and increases the up-time of the instrument.

COBIA SENSE IN DIFFERENT LANGUAGES

In addition to English, you can choose to run your Cobia Sense in several languages such as German, French, Chinese, Spanish, Japanese, Polish, Russian, and Swedish. This can be easily selected via the Cobia menu and we constantly update with more languages.

EASY TO USE

Thanks to the Plug-and-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, Cobia Sense is the perfect tool also for untrained users.

FREE UPDATES

Thanks to RTI's continuous development, you will always be able to update your Cobia Sense to the latest firmware level.

FAST AND RELIABLE CONSTANCY CHECKING

With Cobia Sense there is no need to reset between your measurements, so you can remain in the control room until all your measurements are made. The practical data log allows you to store measurements for later viewing.

COBIA SENSE HIGHLIGHT LIST

- Connects most RTI probes
- Can be used with ion chambers
- Large rotatable display
- Data logging
- Plug-and-Play
- Recognizes external probes automatically
- Long-lasting rechargeable battery
- Free firmware updates via Internet
- 2-year calibration cycle
- Up to 10 years warranty
- Can be used for all modalities

COBIA SENSE FOR CT

RTI provides a Cobia Sense dedicated for CT. Used together with either CT Dose Profiler or a pencil ion chamber, Chamber Adapter, and CTDI phantoms, you will get an excellent and easy-to-use CT QA tool. This solution gives you an easy way to calculate CTDI values e.g. CTDIw , CTDI100 or CTDIvol and DLP.

DCT-10 ION CHAMBER

The DCT-10 is a rugged, cylindrical pencil shaped air ionization chamber for CTDI measurements. This chamber is supplied by RTI as an accessory, but other ion chambers can be used providing they can be connected to the Chamber Adapter. Please contact your local RTI distributor for detailed information on chambers that are suitable.

CT DOSE PROFILER*

CT Dose Profiler – a pioneer at measuring CT dose. The CT Dose Profiler also has the ability to further analyze the result. Because of its revolutionary design it has transformed the CTDI measurement from being inaccurate due to underestimation of the dose for wide beams to be more exact. Together with the Cobia Sense it gives you an accurate image of the dose distribution in a CT beam. Cobia Sense transmits data from the CT Dose Profiler via Bluetooth to a PC running the Ocean software. This requires a Cobia Sense with the Bluetooth option.

**The CT Dose Profiler is a very powerful CT tool from RTI. For white papers and more information, please contact your local RTI representative.*

CT ACCESSORIES

The DCT10 is a rugged, cylindrical pencil shaped air ionization chamber for CTDI measurements.

The Chamber Adapter makes it possible to use Ion Chambers with the Cobia Sense.

The CT Dose Profiler is used to determine an accurate image of the dose distribution in a CT beam.

COBIA SENSE FOR MAM

Your Quality Control and Service of the mammography systems must be done in an accurate, quick and efficient way. To make sure that the dose and other parameters are within acceptance limits and to ensure that the hospitals do not have any down time on the X-ray systems the Cobia Sense provides you with efficient solutions for this area.

Mammography measurements can be made with the RTI Dose Probe with mammography calibration option. With a design that allows measurement in low dose and dose rates, and a size small enough to avoid influence to AEC the RTI Dose Probe is ideal for Mammography applications.

For occasions when ion chamber is required the Magna 1cc ion chamber, specifically designed for Mammographic measurements, can be used.

DOSE, DOSE RATE AND EXPOSURE TIME

For constancy measurements with low dose and low energy levels the RTI Dose Probe is a great choice thanks to its' high sensitivity and excellent repeatability characteristics.

HVL

The optional HVL stand provides holders for both the RTI Dose Probe and filters and makes the HVL measurements manageable, reliable and repeatable.

MAMMOGRAPHY ACCESSORIES

The Magna 1cc ionisation chamber is designed especially for mammographic dose and dose rate measurements.

The Chamber Adapter makes it possible to use Ion Chambers with the Cobia Sense.

The RTI Dose Probe is an external dose probe, with ruggedized design for quick and easy use.

COBIA SENSE FOR RAD/FLUORO

Thanks to the quick response and high sensitivity of the RTI Dose Probe, measurements in radiography and fluoroscopy applications are quick, easy and reliable. The RTI Dose Probe is designed to perform very low dose rate measurements, for instance on image intensifiers. For situations requiring a probe with a smaller footprint or less influence on AEC – the T20 Dose Detector can be used.
Cobia Sense automatically identifies the probes you connect and makes all necessary adjustments without any need for interaction from the user.

DOSE AND DOSE RATE

Both entrance dose and exit dose can be measured by selecting the appropriate external probe: the RTI Dose Probe, alternatively the T20 Dose Detector, which are both backscatter protected.

For occations when Ion chamber is required, the Cobia Sense will allow different ion chambers to be connected via the Chamber Adapter. Please contact your local RTI distributor for detailed information of which chambers that are suitable.

DOSE PER PULSE, PULSE FREQUENCY, PULSE LENGTH, EFFECTIVE TIME

The RTI Dose Probe is small and has a fast response which makes it ideal for pulsed fluroscopy. With excellent sensitivity and fast signal response, the RTI Dose Probe as well as the T20 Dose Detector is perfectly suited to measure pulse related parameters in a Fluoroscopy environment and enables Cobia Sense to deliver relevant and reliable readings.

RAD/FLUORO ACCESSORIES

The T20 is a solid state detector dedicated for measurements on rad/fluoro systems when it is crucial that the detector itself does not have any effect on the system.

The RTI Light Probe measures the ambient light in the room as well as the brightness on monitors and film viewing boxes.

The RTI Dose Probe is an external dose probe, designed to perform very low dose rate measurements.

SPECIFICATIONS COBIA SENSE

Cobia Sense General

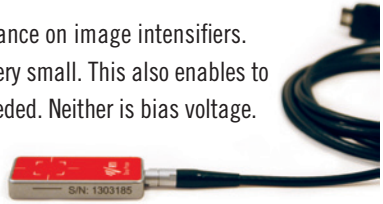
Weight Approx	290 g
Size	138 x 76 x 27 mm³
Power source	Int. battery / ext. power supply
Battery life	10 – 20 hours
Display	Color, 320x240 pixel
Min. exp. time	0.1 ms

	Range	Inaccuracy
Time	0 ms – 2000 s	±1 % or ±0.33 ms
	3 – 9999 pulses	

Art. No: 9763001-00

ACCESSORIES

RTI Dose Probe is an external dose probe, designed to perform very low dose rate measurements for instance on image intensifiers. To avoid or minimize interference with AEC (Automatic Exposure Control) on X-ray equipment, the probe is very small. This also enables to fit it into the table bucky. Since it is a solid-state detector, no corrections for pressure or temperature are needed. Neither is bias voltage.



Specifications RTI Dose Probe (External Probe)

General	
Backscatter protected	Yes
Size	20 x 45 x 7.4 mm3, 0.79 x 1.8" x 0.2"
Pulse frequency	1/6 – 260 Hz

Dose	5 nGy – 2 kGy, 0.6 µR – 250 kR
Dose rate	0.2 µGy/s – 200 mGy/s, 1.5 mR/min – 1.5 kR/min
Dose per 180 R/p	pulse 1 nGy/p – 1600 mGy/p, 0.1 µR/p –
Inaccuracy	±5 %

The T20 is a solid state detector dedicated for measurements on radiographic and fluoroscopic systems when it is crucial that the detector itself does not have any effect on the system. This probes main task is measurements of the skin entrance dose and maximum dose rate in the radiographic and fluoroscopic field.

Specifications T20

Dose	35 nGy–15 kGy, 4 µR–1700 kR
Dose rate	1.5 µGy/s – 1500 mGy/s
	10 mR/min – 10 kR/min

Dose per pulse	5 nGy/pulse–11 Gy/pulse, 0.6 µR/pulse – 1.3 kR/pulse
Inaccuracy	±5 %
Backscatter protected	Yes

The CT Dose Profiler provides a pioneering method of CT dose measurements. It also has the ability to further analyze the result – all in one shot. The CT Dose Profiler is also ideal for measuring point dose and dose rate in the CT beam.

Specifications CT Dose Profiler

Ranges	3.5 µGy/s to 3.3 Gy/s
Inaccuracy	±5 % or ±0.4 µGy/s

The Chamber Adapter makes it possible to use Ion Chambers with the Cobia Sense. It is primarily designed for Mammography and CT use, but can of course be used for other applications.

Specifications Chamber Adapter

Current Ranges	10 pA to 0.1 µA
	±2 % or ±1 pA

The DCT10 is a rugged, cylindrical pencil shaped air ionization chamber for CTDI measurements. The CT chamber is intended for measuring and monitoring the exposure output level of CT scanners in a phantom or in air. CT dose index, CTDI, can be measured in accordance with IEC 61223-2-6.

Specifications DCT10

Dose length with pencil ion chamber (CT) and Chamber Adapter	
Dose length rate	0.5 mGycm/s to 1.7 Gycm/s, ±6 %
Inaccuracy	±6 % or ±0.08 mGycm/s
Note! The DCT10 requires Chamber Adapter connection.	

The Light Probe measures the ambient light in the room as well as the brightness on monitors and film viewing boxes.

The RTI Light Probe has the same spectral response as the human eye and complies with the CIE curve. This makes it reliable for all kind of measurements, independent of the light source.

Specifications Light Probe

Monitor, viewing box		
	Ranges	0.20 cd/m² – 150 kcd/m²
	Inaccuracy	±5 %
Ambient light		
	Ranges	0.08 lx – 70 klx
	Inaccuracy	±5 %

The Magna 1cc ionisation chamber is designed especially for mammographic dose and dose rate measurements.

Specifications Magna 1cc

Dose rate	0.13 mGy/s to 0.4 Gy/s
Inaccuracy	±6 % or ±0.15 mGy/s
Note! The Magna 1cc requires Chamber Adapter connection.	

The MAS-1 is an invasive probe that together with the Cobia Sense provides you direct reading of mA and mAs. The probe can be used to measure tube current for all modalities including fluoroscopic and radiographic exposures.

Specifications Mas-1

Ranges	0.001–9999 mAs, 0.1 mA–3000 mA
Inaccuracy	±1 % or ± 0.01 mA

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We offer more than just measuring instruments. We'd like to be your partner and help you in your daily work. We want you to trust us and count on us. We promise to do our best to make it easier for you in your everyday working life.

RTI

World Headquarters
RTI Electronics AB
Flöjelbergsgatan 8 C
SE-431 37 Mölndal
SWEDEN

Phone: + 46 31 746 36 00
Fax: + 46 31 27 05 73
E-mail: sales@rti.se
www.rti.se

US Office
RTI Electronics, Inc.
33 Jacksonville Road, Bldg. 1
Towaco, NJ 07082
USA

Phone: 1-800-222-7537
Fax: 1-973-439-0248
E-mail: sales@rtielectronics.com
www.rtielectronics.com