

Ocean Next

Quick Check

Ocean Next Quick Check - English - Version 1.4A

Welcome to Quick Check

Ocean Next with Quick Check is a powerful tool for everybody working with Quality Assurance of X-ray systems. Ocean Next can be used with the X-ray meters Piranha and Cobia from RTI.



INDEPENDENT X-RAY
QUALITY ASSURANCE

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Intended Use of the Ocean Software

Together with instruments from RTI Group AB the Ocean Software is intended to be used for independent service and quality control, including measurements of kerma, kerma rate, kVp, tube current, exposure time, luminance, illuminance, and dose area product, within limitations stated below.

If installed according to accompanying documents, the product is intended to be used together with all diagnostic X-ray equipment except for:

- therapeutic X-ray sources.
- X-ray equipment with tube potential below 18 kV or above 160 kV.
- X-ray equipment on which the instrument cannot be mounted properly.
- specific types of X-ray equipment listed in the instructions for use or in additional information from the manufacturer.

With the X-ray installation without patient present, the product is intended to be used:

- for assessing the performance of the X-ray equipment.
- for evaluation of examination techniques and procedures.
- for service and maintenance of the X-ray equipment.
- for quality control of the X-ray equipment.
- for educational purposes, authority supervision etc.

The product is intended to be used by hospital physicists, X-ray engineers, manufacturer's service teams, and other professionals with similar tasks and competencies. The operator needs training to be able to use the product as intended. This training can be achieved either by study of the manual, study of the built-in help function in measurement software or, on request, by a course ordered from the manufacturer.

The product is intended to be used inside X-ray rooms ready for clinical use and can safely be left switched on and in any measuring mode in the vicinity of patients.

The product is NOT intended to be used:

- for direct control of diagnostic X-ray equipment performance during irradiation of a patient.
- so that patients or other unqualified persons can change settings of operating parameters during, immediately before, or after measurements.
- for any guidance to diagnosis of patients.

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1 Introduction to Quick Check

Quick Check is the display for your meter when you just need to make a quick measurement. Quick Check uses plug-and-play and adapts to the meter you use and the detector you have connected.

You can do the following with Quick Check:

- Quick measurements
- Save your measurements
- Print a simple report
- Export to Excel

Quick Check is part of Ocean Next and corresponds to the first license level called QUICK that is included with each meter. It is possible to upgrade to ADVANTAGE or PROFESSIONAL to get more capabilities.

2 Installation

Ocean Next requires Windows 10 or 8.1.

The screen you use must at least have resolution of 1280 x 800 with factor of 100% (setting in Windows). The table below shows minimum screen size with other scale factors:

Scale factor	Minimum screen size
100%	1280 x 800
125%	1600 x 1000
150%	1920 x 1200
175%	2240 x 1400
200%	2560 x 1600
250%	3200 x 2000
300%	3840 x 2400
350%	4480 x 2800
400%	5120 x 3200

Example: Your screen has a resolution of 1920 x 1080, maximum scaling you can use in Windows is 125%.

Ocean will warn if screen size is incorrect and continue to run but certain objects may not be visible on the screen and it might be confusing and difficult to use the application.

Installation

Quick Check is installed with the Ocean Next installer. Run the installer and follow the on screen instructions. In case you have Ocean 2014 installed on your computer, you will be asked during the installation process if you want to import your data from Ocean 2014. If you accept this, all your data from Ocean 2014 will be imported and available in Ocean Next. It will take some extra time the first time you start Ocean Next since all your old data needs to be converted to the new Ocean Next format. Your old data and Ocean 2014 will be left exactly as it is and Ocean 2014 will continue to run as before. In case you want to use an Ocean 2014 database from another computer, use the Database Backup function to make a copy of the database, move the file to the computer with Ocean Next, and use the Restore Database function to load the database.

Ocean Next is installed for one user and will require you to specify a username and password. Username must be an e-mail address.

It is recommended, in case you are more than one person using the same computer to run Ocean, that each user has a personal Windows account on the computer and installs their own copy of Ocean with his own username and password. Working in this way, will make your and your colleagues setup more compatible with future functions coming from RTI Group.

3 Starting Ocean Next for the first time

When you start Quick Check (Ocean Next) for the first time you are asked to specify a user profile:

Fill in the required information. It is recommended that use your personal e-mail as username, this will make your setup more "future proof" when RTI Group in a near future releases new functions related to Ocean Next. At this point is the information you enter here only stored locally on your computer, and your e-mail address will only be used in case you chose to send a support file to RTI Group. Your name and organization/company are automatically used in the corresponding fields to specify who the "tester" is when Ocean creates a printed report. You always have the option to change or remove this information.

Important: You can't change your username once you have created the account. If you have any problem, please contact RTI Support. You must contact RTI Support if you forget your password. You will get a "reset key" sent to the e-mail address you use as username.

The information will not be used for any other purpose without your approval.

After you have created your account, the start-up procedure continues. If you, during the installation process, choosed to import a database from Ocean 2014, a migration process starts that will take a few minutes depending on the size of the database. The progress is shown on your screen. Note that your existing installation of Ocean 2014 is not affected, it is kept exactly as it is.

You are ready to start when Ocean Next Backstage view is shown.

4 Login

If you have unchecked "Keep me logged in", you will have to enter your username and password every time you start Ocean Next:

If you have forgotten your password you can reset it in the following way:

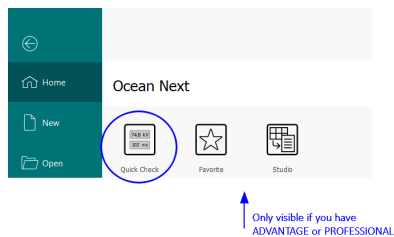
1. Click on the text "I have forgotten my password".
2. A new dialogue is shown:

3. Send your username to Support or call to get a "reset key".
4. When you have the "reset key" enter it in the field and click on the "Login" button.

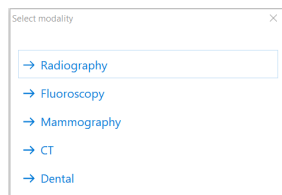
5 Start a Quick Check measurement

When Ocean Next is started, the Backstage Home page is show. You can read more about the Backstage Home page here... (section "Backstage").

1. Power on your meter, and in this case, disconnect any external probe. Start Quick Check by clicking on the **Quick Check** button:



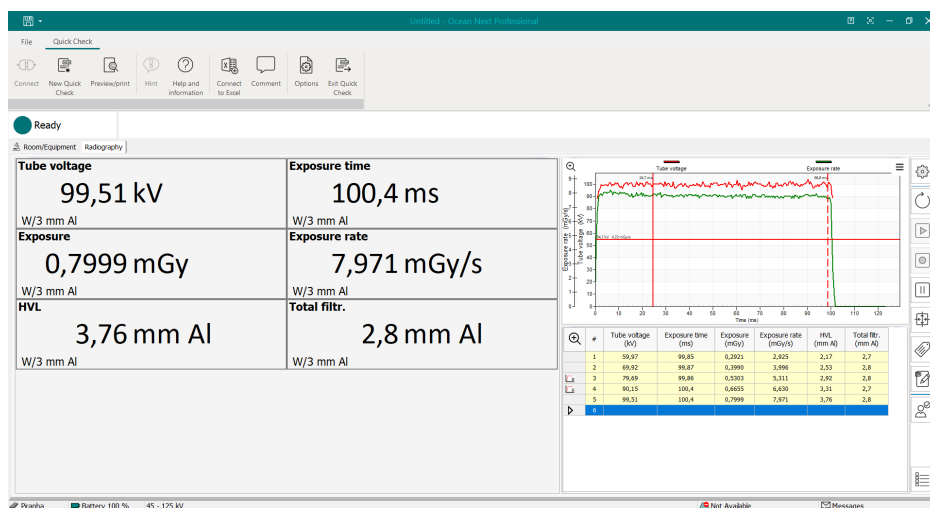
2. Depending on connected meter, next step might look different. In this case is a Piranha Multi used. The following is show:



Select for example Radiography. For other modalities from here and on; it may be several choices to make before the measurement screen appear. For example, for mammography you must chose calibration and if compression plate is used or not.

6 The Quick Check view

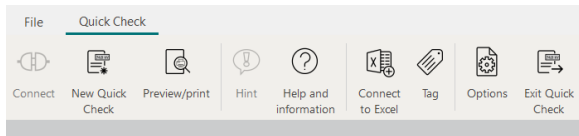
When you have done required selections, Quick Check connects to your meter and the Quick Check view loads. You are now ready to make an exposure:



- At the top is the ribbon bar with buttons for various functions
- Measured values are shown in the displays
- Measured values are logged and saved in the grid
- Waveforms are shown

Ribbon bar

At the top is the "Ribbon bar" located; it has two tabs; "File" and "Quick Check". The "Quick Check" tab shows all major Quick Check functions and "File" shows the Backstage.



Click here to connect to meter.

During measurements this button is disabled since it is not possible to use "keyboard" mode in Quick Check.



Start a new Quick Check measurement.



Preview and/or print the report, read more here... (section "Preview and Print").



Get specific help with current measurement.



Access the help text. You can also use "F1" on your keyboard.



Transfer data to Excel, read more here... (section "Transfer data to Excel").



Add a comment to the measurement, read more here... (section "Comment").



Access Quick Check options, read more here... (section "Quick Check Options").



Terminate Quick Check.

Toolbar

The toolbar on the right side gives you quick access to functions often used when performing measurements.



Open Meter and probe settings, read more here... (section "Meter and Probe Settings").



Reset meter.



Start measurement. Used when it is "Timed mode" to start measurement manually.



Capture a measurement. Can be used, for example, during fluoroscopy to capture a measured value when radiation is stable.



Pause measurement. Can, for example, be used when an external probe must be moved to avoid false triggering.



Position check. Verify that the meter is correctly positioned when doing kVp measurements.



Add a tag, read more here... (section "Tag").



Add a note and/or an attachment to current row, read more here... (section "Note and Attachment").



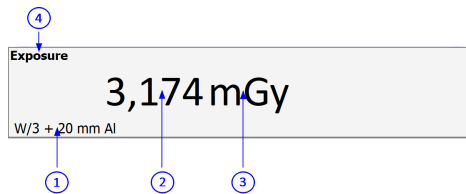
Turnoff/on the "Exposure Assistant". The "Exposure Assistant" is used to capture a value when radiation is stable during fluoroscopy exposures.



Expand the toolbar

Displays

One display for each measured value is shown in the display panel. Each display can be individually configured:



- 1 - Click on the text to select another calibration
- 2 - Click on the measured value to change number of decimals
- 3 - Click on the unit to change to another unit
- 4 - Double-click on the empty space to enlarge and move this display to the top of the display panel

Grid

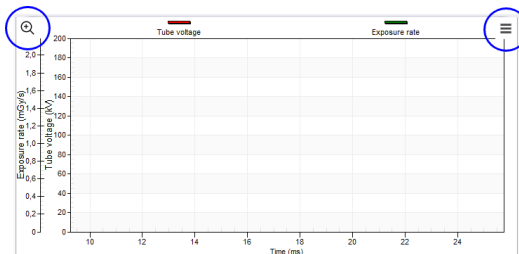
Measurements are logged and saved in the grid:

#	Tube voltage (kV)	Exposure time (ms)	Exposure (mGy)	Exposure rate (mGy/s)	HVL (mm Al)	Total filter (mm Al)
1						

- A new row is created in the grid for each exposure.
- It is possible to repeat measurements by clicking in the first column on a previous row.
- Click on the magnifying glass to enlarge the grid

Waveform

Waveforms are shown in the waveform panel:



- Shows the waveforms for the current measurement.
- Click on the magnifying glass to enlarge the waveform.
- Click on the menu symbol to access smoothing and to include waveform image in the report, read more about the report here... (section "Preview and Print").
- Horizontal and vertical cursors can be moved and values are indicated close to each cursor.

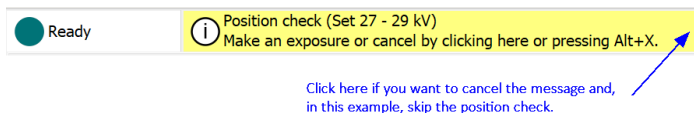
Status bars

There are two status bars that shows different information related to the measurement and the program. The "upper status bar" is located under the ribbon bar and the "lower status bar" is located at the bottom of the Quick Check view.

The **upper status bar** shows meter status and different messages when you measure:



In some situations a message is shown with a yellow background; all such messages can be closed by just clicking or tapping on the yellow background:



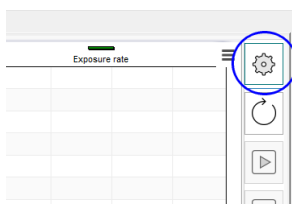
The **lower status bar** shows:



- Meter used
- Battery status
- kV-range, click here to change kV-range (only Piranha)
- RTICloud status (not applicable yet)
- Messages, click here to see if any messages are available

Change meter settings

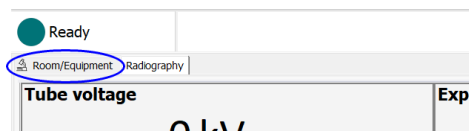
In some situation it might be necessary to change meter settings to get optimal conditions for a certain measurement. Click on the **Settings** button on the toolbar to the right to open "Meter and probe settings".



Read more here... (section "Meter and Probe Settings").

Enter room and equipment information

It is possible to include room and equipment information in the printed report. You can enter this information on the Room/Equipment page:



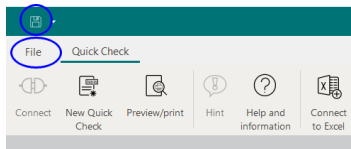
Read more here... (section "Room and Equipment Information").

Preview and/or print the report

To preview or print the report, click on the **Preview/Print** button on the ribbon bar, read more here... (section "Preview and Print").

Save the measurement

Select "File" on the ribbon bar or click on the Save button on the title bar:



You will be directed to the Backstage, select **Save as...** if it is the first time, or "Save" if you already has given your measurement a name and location.

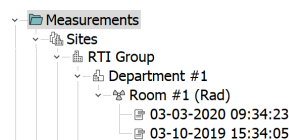
Measurements are saved in Ocean's database. Depending on the license level, measurements can be saved in two different "places":

- In a the "Folders section"
- In a room that belong to a specific site (only available if you have license level PROFESSIONAL)


Folders

Here you can create your own folder structure and save and organize your measurements.

Sites (only license level PROFESSIONAL)



Here is a fixed structure where a site has a "Facility", the facility has one or more "Departments" and each department has one or more rooms where measured data can be saved.

The symbol  shows that it is a Quick Check measurement.

Close Quick Check

To close and quit Quick Check in two different ways:



Quit the entire application by clicking in the upper right corner of the "application window".

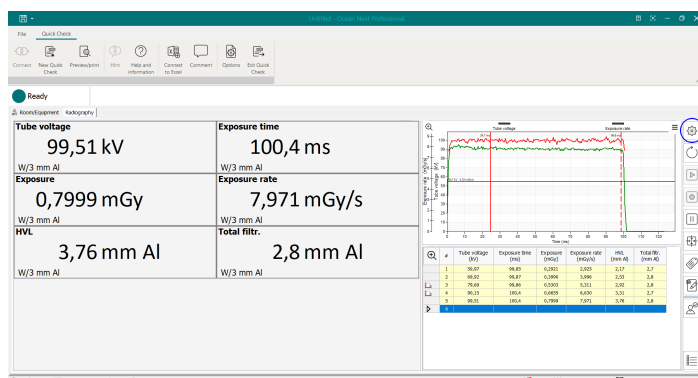


Click on the **Exit Quick Check** button to quit and return to the Backstage.

By default, Quick Check is not asking you to save when you exit Quick Check or starts a new measurement. This can be changed in Options, read more here... (section "Quick Check Options").

7 Meter and Probe Settings

Piranha and Cobia have slightly different meter settings but the way you access and change them is the same. Quick Check will recognize which meter you use and automatically adapt to it. To access the meter settings, click on the **Settings** button on the toolbar on the right side:

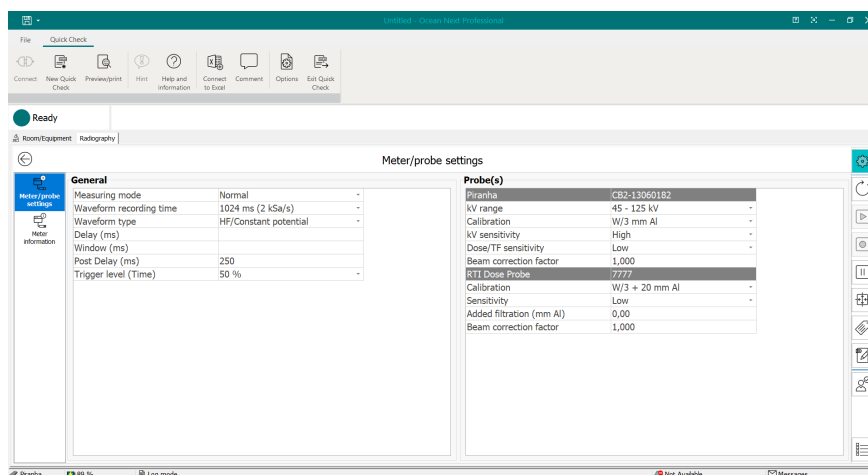


Piranha - read more here... (section "Piranha").

Cobia - read more here... (section "Cobia").

7.1 Piranha

When you click on the **Settings** button, the following is shown (in this example ia also an external dose probe used):



Here you can change the meter settings. If an external probe is used, its settings are also shown here. Return to the display panel by clicking the **Back** button or the **Settings** button again.

The following meter settings are available for Piranha in Quick Check:

Meter setting	Description and use
Delay	Add a delay after the detection of trig before measurement of kVp starts. This will delay the kVp measurement, it doesn't affect dose, mAs or time measurements.
Window	If a time is specified, kVp is measured during the window time (starts after the delay)
Post delay	This is the time the meter waits after trig off before it assumes that the exposure is finished. The post delay must be set to a time longer than any dead time in the radiation.
kV range	Current kV range. You need to change this for radiography/fluoroscopy and CT, mammography and dental have only one range.
Calibration	Available calibrations for the internal (kVp and exposure) used. See table below that describes usage of the different calibrations.
kV sensitivity	Sensitivity setting for the kVp detector (internal detector). Hi = High sensitivity - for low dose rate Lo = Low sensitivity - for high dose rate

Meter setting	Description and use
Dose/TF sensitivity	Sensitivity setting for the dose and total filtration measurement (internal detector). Hi = High sensitivity - for low dose rate Lo = Low sensitivity - for high dose rate
Beam Correction factor	General (user-defined) correction factor used for all exposure related parameters measured with the internal detector.
Measuring mode	You can select between Normal, Timed or Free run Normal = use this measuring mode for exposures and fluoroscopy Timed = meter measures during a time you specify Free run = meter measures continuously without use of any trig levels (for more information see table below)
Measurement time (Timed mode only)	Measuring time when Timed mode is used.
Waveform recording time	Select the waveform recording time. Use the shortest time to see details in the waveform. If you use a longer time, you lose details in the waveform. This setting doesn't influence on the accuracy.
Waveform type	This is the waveform type for the X-ray generator. It is normally HF/DC. Sometimes for older X-ray units and for dental you must use 1-phase. Be careful to select the correct waveform type for maximum accuracy. Note that there is a special selection for AMX-4.
For mammography: Added filtration	Added filtration used for the internal detector do do energy compensation and kV compensation.
Trigger level (time)	This is the level used for the time measurement. You can use this if you want for example to avoid pre-pulses to be included in the exposure time.

External probe settings	Description and use
Calibration (External)	Calibration for the external probe
Sensitivity (External)	Sensitivity setting for the external probe Hi = High sensitivity - for low signals Lo = Low sensitivity - for high signals
For R/F, dental: Added filtration (External)	The filtration used the external RTI Dose Probe to do energy compensation. IMPORTANT: The filtration used for energy compensation is the sum of "Total Inherent Filtration" from the Room/Equipment page plus "Added filtration".
For Mammography: Added filtration (External)	Added filtration used for the external RTI Dose Probe do do energy compensation IMPORTANT: The filtration used for energy compensation is the sum of "Compression paddle thickness" from the Room/Equipment page plus "Added filtration". .
Beam Correction factor (External)	General (user-defined) correction factor used for all exposure related parameters measured with the external detector.

How to use the different calibrations:

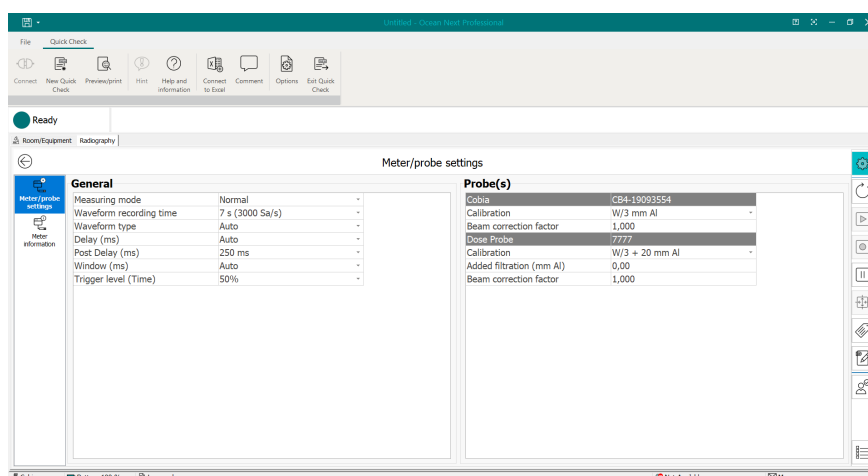
Code	Calibration	Usage
R1 C1	W/3 mm Al	General radiography, fluoroscopy, dental and CT
C3	Straton (Siem1)	Suitable for Siemens CT with Straton tube
C4	GECT (7°)	Suitable for GE CT tubes with a 7° anode angle as well as for other manufactures CT tubes and replacement tubes with a 7° anode angle
C5	Aquillion 64-	Suitable for Toshiba Aquillion 64-320 CT
C6	GECT (10.5°)	Suitable for GE CT tubes with a 10.5° anode angle
C7	GECT (Cardiographie)	Suitable for GE CT Cardiographie
M1	Mo/30 µm Mo	General mammography
M3	Mo/25 µm Rh	General mammography
M4	Rh/25 µm Rh	General mammography
M6	W/50 µm Rh	General mammography - suitable for Hologic Selenia Dimensions and Fujifilm Amulet
M7	W/0.50 mm Al	General mammography - suitable for Philips MicroDose (Sectra)
M8	Mo/1 mm Al	General mammography
M10	W/50 µm Ag	General mammography - suitable for Hologic Selenia Dimensions and Fujifilm Amulet
M11	W/75 µm Ag	General mammography
M12	W/50 µm Rh (Gio)	Suitable for Giotto Mammography
M15	W/0.70 mm Al	General mammography - suitable for Hologic Selenia Dimensions and Fujifilm Amulet
M16	W/50 µm Ag (Sel)	Suitable for Hologic Selenia
M17	W/50 µm Rh (Sel)	Suitable for Hologic Selenia
M18	W/0.30 mm Cu	General mammography - Suitable for Hologic Selenia Dimensions and Fujifilm Innovality/Cristalle
M19	W/0.70 mm Al (Inno/Crist)	Suitable for Fujifilm Innovality/Cristalle
M20	W/50 µm Rh (Inno/Crist)	Suitable for Fujifilm Innovality/Cristalle
M21	Mo/25 µm Rh (Sel)	Suitable for Hologic Selenia
M22	Rh/30 µm Ag (GE HC)	Suitable for GE Senographe Prestina
M23	Rh/30 µm Ag IQST (GE HC)	Suitable for GE Senographe Prestina
M24	Mo/0.25 mm Cu (GE HC)	Suitable for GE Senographe Prestina
M25	Rh/0.25 mm Cu (GE HC)	Suitable for GE Senographe Prestina
M26	Mo/30 µm Mo (GE HC)	Suitable for GE Senographe Prestina
M27	Affirm Prone W/Ag	Suitable for Hologic Affirm Prone
M28	Affirm Prone W/Al	Suitable for Hologic Affirm Prone

There are three different measuring modes available using the Piranha. They are as follows:

Measuring mode	Description and use
Normal	The Normal mode is used for short and long (fluoro) exposures. In this mode, your meter will automatically sense if there is a signal and when it is above a certain trigger level. If the exposure is long, the displays/grid will be updated with new data every 2 seconds. If the exposure is short, the results are displayed as soon as the trigger is off.
Free run	The free run mode has no trigger level. As soon as the meter is told to begin measuring, it starts to measure even if there is no signal. This measuring mode is useful when the signal you want to measure is very low. Free run is recommended for light measurements, especially when measuring "ambient" light (when no shutter is present).
Timed	The Timed mode setting measures during a pre-defined time period. Measurements in Timed mode must be started manually. This measuring mode is very useful when you want to measure a very low signal. You can use the "very high" sensitivity setting in Timed mode and it will further improve the meter's capability to measure very low signals.

7.2 Cobia

When you click on the **Settings** button, the following is shown (in this example ia also an external dose probe used):



Here you can change the meter settings. If an external probe is used, its settings are also shown here. Return to the display panel by clicking the **Back** button or the **Settings** button again.

The following meter settings are available for Cobia in Quick Check:

Meter setting	Description and use
Delay	Add a delay after the detection of trig before measurement of kVp starts. This will delay the kVp measurement, it doesn't affect dose, mAs or time measurements.
Window	If a time is specified, kVp is measured during the window time (starts after the delay)
Post delay	This is the time the meter waits after trig off before it assumes that the exposure is finished. The post delay must be set to a time longer than any dead time in the radiation.
Calibration	Calibration for the internal probe.
Beam Correction factor	General (user-defined) correction factor used for all exposure related parameters measured with the internal detector.

Meter setting	Description and use
Measuring mode	You can select between Normal or Timed Normal = use this measuring mode for exposures and fluoroscopy Timed = meter measures during a time you specify (for more information see table below)
Measurement time (Timed mode only)	Measuring time when Timed mode is used.
Waveform type	Select "Auto" for all types except AMX-4.
Waveform recording time	Select the waveform recording time. Use the shortest time to see details in the waveform. If you use a longer time, you lose details in the waveform. This setting doesn't influence on the accuracy.
Trigger level (time)	This is the level used for the time measurement. You can use this if you want for example to avoid pre-pulses to be included in the exposure time.

External probe setting	Description and use
Calibration (External)	Calibration for the external probe.
For R/F, dental Added filtration (External)	The filtration used the external RTI Dose Probe to do energy compensation. IMPORTANT: The filtration used for energy compensation is the sum of "Total Inherent Filtration" from the Room/Equipment page plus "Added filtration".
Beam Correction factor (External)	General (user-defined) correction factor used for all exposure related parameters measured with the external detector.

How to use the different calibrations (only one calibration is available for Cobia):

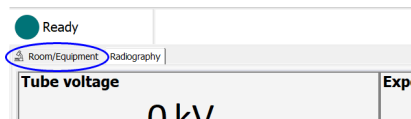
Code	Calibration	Usage
R1	W/3 mm Al	General radiography, fluoroscopy and dental

There are two different measuring modes available using the Cobia. They are as follows:

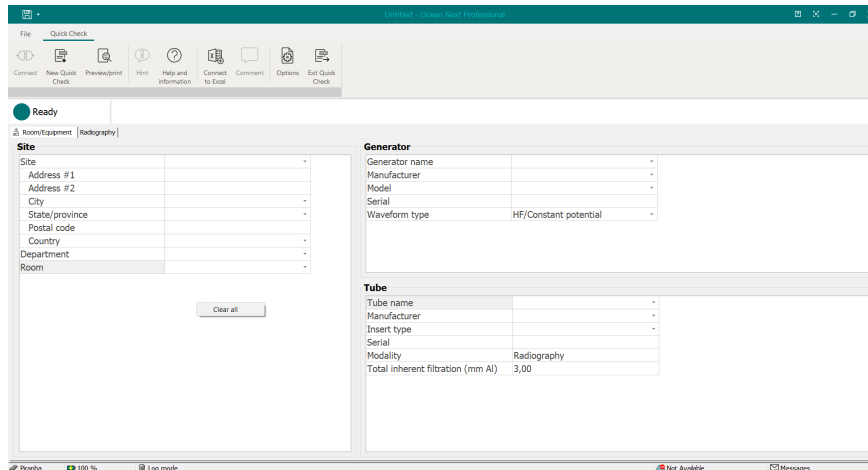
Measuring mode	Description and use
Normal	The Normal mode is used for short and long (fluoro) exposures. In this mode, your meter will automatically sense if there is a signal and when it is above a certain trigger level. If the exposure is long, the displays/grid will be updated with new data every 2 seconds. If the exposure is short, the results are displayed as soon as the trigger is off.
Timed	The Timed mode setting measures during a pre-defined time period. Measurements in Timed mode must be started manually. This measuring mode is very useful when you want to measure a very low signal. You can use the "very high" sensitivity setting in Timed mode and it will further improve the meter's capability to measure very low signals.

8 Room and equipment information

You can include information about site, generator and tube with your measurement. This is done on the **Room/Equipment** tab.



When selecting this page, the following is shown:



Here you can fill in the information. Depending on the license level this can be done in different ways:

QUICK and ADVANTAGE Fill in free text in the fields

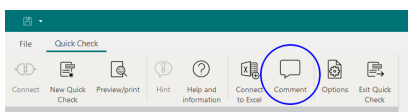
PROFESSIONAL Fill in free text in the fields or use "quick search" in the database. Example: You are in a room that you already have in your database and want to enter the information. Start to type the room name, Quick Check will suggest matching room names. Select the room and all other information is automatically filled in. If a field is not filled in, it depends either on missing information or there is no unique information (the room has for example two generators). Place the cursor in the blank field and the available alternatives are shown.

Note: Once you have auto-filled, you must do "clear all" to be able to auto-fill again.

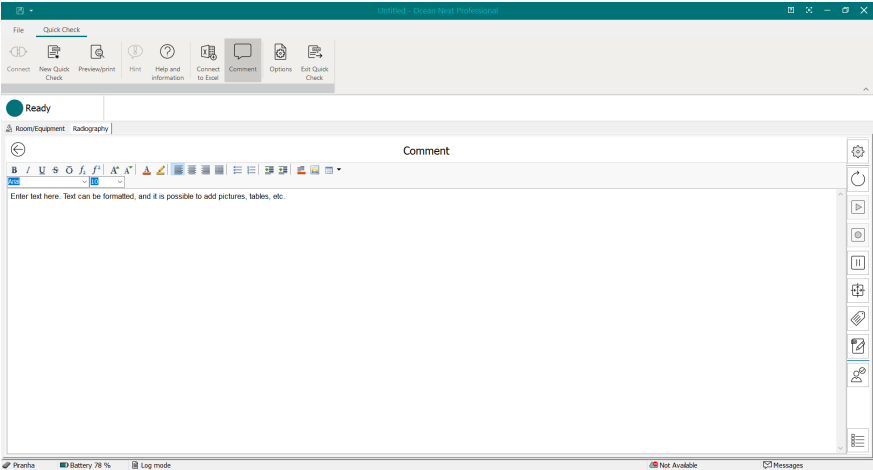
When you are ready, click on the measuring tab, in this case "Radiography", to go back to the display panel.

9 Comment

It is possible to add a comment that will be included in the printed report. Click on the Comment button on the ribbon bar:



The comment page is opened:



Enter the text, all normal functions are available such as, formatting, tables, include images, fonts, etc.

To go back to the display panel, click on the **Back** button or the **Comment** button again. If you want to see or modify the comment again, click on the **Comment** button.

The comment will be automatically included in the printed report:
Read more about the report here... (section "Preview and Print").

Untitled

Radiography

Test date:

Measurements

#	Tube voltage [kV]	Exposure time [min]	Exposure mR/h	Exposure rate mR/hg	HVL [mm Al]	Total film [mm Al]
1	0	0	0	0	0	0

Comments

Enter text here. Text can be formatted and it is possible to add images, tables, etc.

Print date: 2020-10-08

This report is created with Ocean 2014

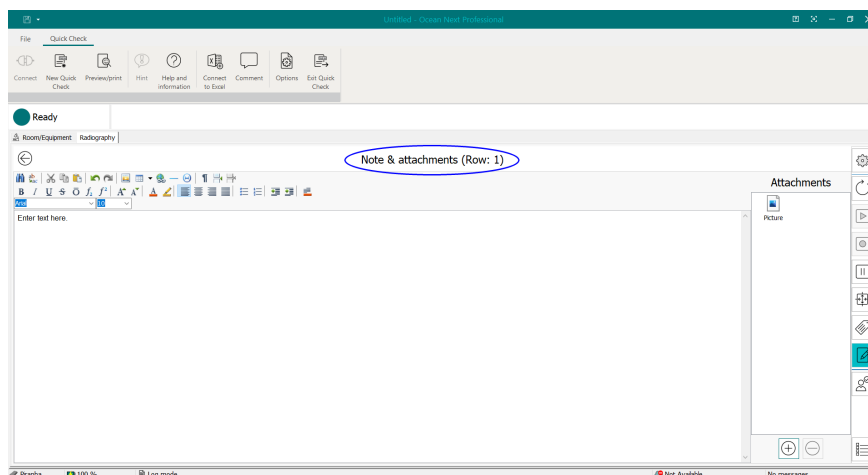
1 (1)

10 Note and attachment

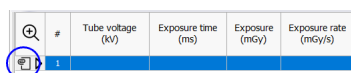
It is possible to add a note and/or an attachment to each exposure. Click on the **Note and Attachment** button on the toolbar on the right side:

time	Exposure (mGy)	Exposure rate (mGy/s)	H/VL (mm Al)	Total filtr. (mm Al)

The Note and Attachment page is shown:



Here you can add a note and/or attach a file related to the row indicated at the top. It is possible to use drag-and-drop to attach files or click on the **Plus** button. It is indicated in the first column when a note and/or attachment is added to a row:



To remove an attachment, select it and click the **Minus** button.

To return to the display panel, click the **Back** button or the **Note and Attachment** button again.

Note: The note and attachment is not included in the printed report.

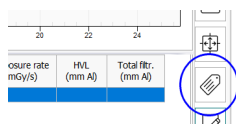
11 Tag

It is possible to tag measured values with an identifier to easily find an exposure in the meter log.

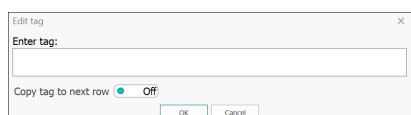
Note!

The meter log is a coming feature that will be available with the RTICloud. With the meter connected, all measured data will stored automatically in a "meter log".

To add a tag, click on the **Tag** button on the toolbar on the right side:



Enter the tag in the text field:



You can chose if you want the tag to be automatically copied to the next exposure or just attached to current exposure. If you turn on "copy to next row", the tag is attached to every exposure until you turn it off or until you start a new Quick Check measurement. Click **Ok** to activate the tag, or **Cancel** to skip any action. It is indicated in the first column when a tag is added to a row:

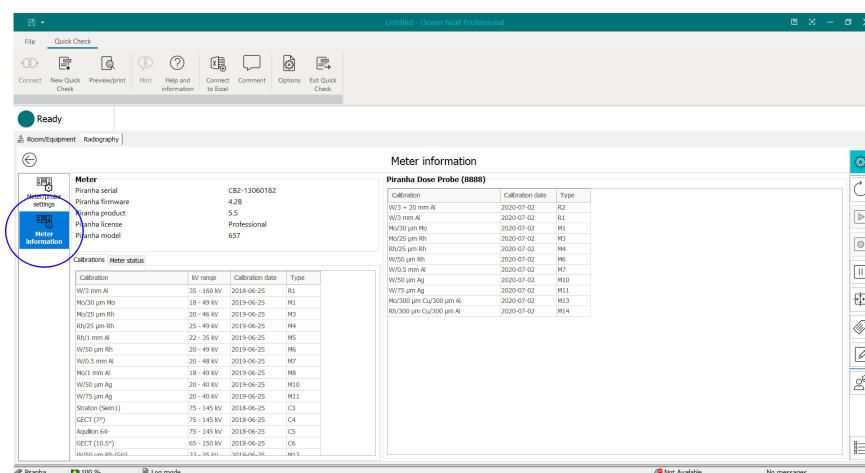
#	Tube voltage (kV)	Exposure time (ms)	Exposure (mGy)	Exposure rate (mGy/s)
1				

12 Meter information

To view the Meter information, click on the **Settings** button on the toolbar on the right side and then the **Meter Information** button on the left side:



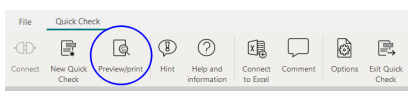
The Meter Settings page shows information about currently used meter and external probe(if connected):



Close the **Meter Information** page by clicking on the **Back** button or on the **Settings** button again.

13 Preview and print

You can directly print your measured data (or create a PDF file) just click on the **Preview/Print** button on the Quick Check ribbon bar:



A preview of the print-out is shown on the screen:

Quick Check: Radiography

Radiography

Measurements

#	Test voltage (kV)	Exposure time (ms)	Exposure (mR)	Exposure rate (mR/s)	ISO	Total film
1	55.51	55.55	0.2961	2.528	2.17	2.1
2	55.55	55.55	0.2985	2.595	2.23	2.2
3	55.55	55.55	0.3033	2.711	2.32	2.3
4	55.55	102.4	0.6065	5.920	4.71	4.7
5	55.51	102.4	0.7889	7.871	5.78	5.8

Test equipment used

Meter(s): Fluke 57A, C20-1300-82
 Developer(s): Fluke 57A, C20-1300-82

Print date: 2020-11-18 This report was created with Ocean Next 1 (1)

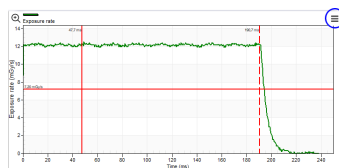
This is the basic print out. You can add more information:

- A comment, see more here... (section "Comment"). The comment is automatically included in the report.
- Site and equipment information, see more here... (section "Room and Equipment Information").
- One or more waveforms

How to add waveforms

By default no waveform are included in the report. To include waveform in the report:

1. In the grid, select the row with the waveform you want to include.
2. Click on the Menu button in the upper right corner of the waveform panel.



3. Click on "Include waveform in report".
4. Repeat for more rows in the grid if you want to include more waveforms.

The picture below shows the report when also site/equipment information and a comment have been added as well. To show it, click on the **Preview/Print** button on the ribbon bar:

RTI Electronics / Department #1 / Room #1 (Rad)
Quick Check: Radiography

Radiography

Report date: 2020-11-18
Tester:
Company:

Site information

Facility name: RTI Electronics	Phone:
Address: Fjellbergsgatan 3 C	Fax:
City: Mölndal	Mobile phone:
State/province:	
Postal code: 431 37	
Country: Sweden	
Facility ID:	Department: Department #1
Contact person:	Room: Room #1 (Rad)
Email:	

Comment

This is measurement was done with Piranha and Ocean Next.

Print date: 2020-11-18
This report was created with Ocean Next
1 (2)

RTI Electronics / Department #1 / Room #1 (Rad)
Quick Check: Radiography

Radiography

Tested equipment

Generator			
Name: X-ray generator	Model: IDEAL RV	Type: HFDC	
Serial #: 12345	Manufacturer: MEDICAL		
Tube			
Name: Rad tube #1	Insert type: BL 150/50/DR	Serial #: 50789101	
Manufacturer: Siemens			

Measurements

#	Tube voltage (kV)	Exposure time (ms)	Exposure (mAs)	Exposure rate (mR/s)	HVL (mm Al)	Total fit (mm Al)
1	25.37	99.52	0.2561	2.564	2.17	2.7
2	49.32	99.52	0.3090	3.094	2.43	2.9
3	73.99	99.59	0.2803	2.811	2.85	2.9
4	99.15	100.4	0.9895	9.890	3.31	2.7
5	99.51	100.4	0.7889	7.871	3.79	2.8

Waveforms

Exposure #3

Exposure #5

Test equipment used

Meter(s): Piranha SN C82-1380162
Detector(s): Piranha SN C82-1380162

Print date: 2020-11-18
This report was created with Ocean Next
2 (2)

To print on a printer or create a PDF file, click on the **Print** or **PDF** button:

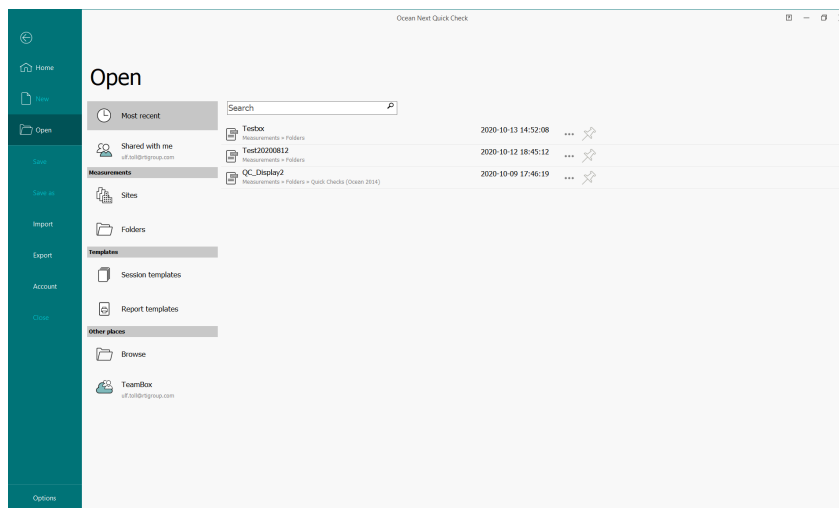



14 Open a saved measurement

You can re-open a Quick Check measurement that you have saved to continue to measure, to view it and/or to print it. To just open and view or print you must not have a meter connected, this can be done in off-line mode.

If you intend to continue to measure; make sure that you have the correct meter and required probe connected. To open a saved Quick Check measurement:

1. Select Open from the Backstage:



2. Select the Quick Check measurement you want to open. It is shown with the image: .
3. If not meter is connected, a dialogue is shown; select "Keyboard" here.
4. Quick Check starts and the required measurement is loaded.
5. You can now continue to measure if you have a meter connected. You can also add any other information from the keyboard, such as room/equipment information, add/edit comment and notes, and print.

To close the measurement, exit Quick Check or start a new Quick Check.

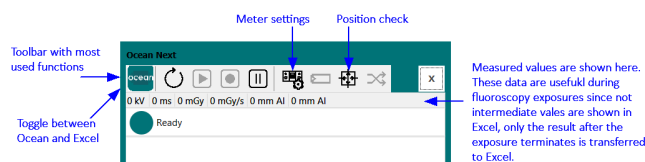
15 Transfer data to Excel

You can transfer data from Quick Check to Excel in three different ways:

- Send current measured data to Excel. The data dump starts in active Excel cell, read more here... (section "Send data to Excel").
- Connect to an Excel workbook. Measured data, are for each exposure, transferred to Excel starting in active cell, read more here... (section "Connect (Standard mode)").
- Connect to an Excel workbook. Measured data, are for each exposure, transferred to Excel starting in active cell. A pre-defined data format is used that is compatible with Excel templates used with Xi and X2 View, read more here... (section "Connect (Fixed format)").

15.1 Excel control window

When an Excel workbook is used with Quick Check a small Excel control window is shown to simplify the interaction between Quick Check and Excel. The exact content in the window is depending on mode (send or connect) and/or used detectors.

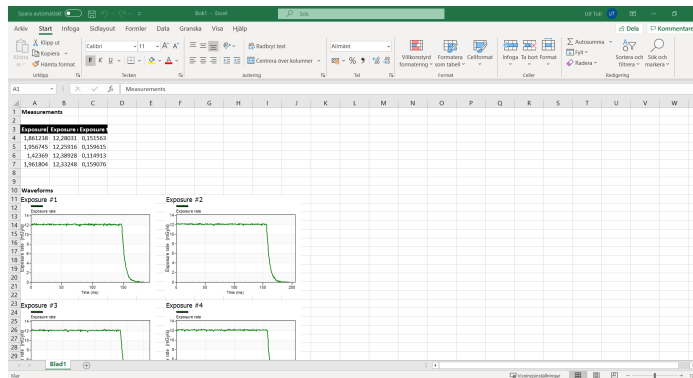


The most common meter settings are available (depending on used detector(s)).

To close the Excel connection, click "x" in the upper right corner of the Excel control window. Both the window and the used Excel workbook will be closed. If necessary, you are asked to save the Excel workbook.

15.2 Send data to Excel

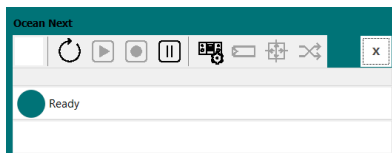
In this mode the entire content in the template is dumped to Excel.



This is used when you want dump your current data to Excel. You have a choice to include or exclude waveforms (waveform are exported as pictures).



1. Click on the **Connect to Excel** button:
2. Select **Send data to workbook**.
3. Next decide if you want waveforms or not. In case you select waveforms, you will be asked about waveform size. The picture above uses "small".
4. Next step is to select which Excel workbook to use:
 - Open a new empty workbook
 - An existing workbook from file
 - A workbook already open on the computer
5. Excel starts and the selected workbook is opened and connected with Quick Check. The Excel control window is opened and shown.



You can change basic meter settings and the left most button is used to switch between Quick Check and Excel, read more here... (section "Excel control window").

6. You can save your Excel workbook and further process your measured data.

15.3 Connect (Standard mode)

When this mode is used, data are transferred to Excel after each exposure. The format is defined by the columns in actual Quick Check. Only numerical values are sent to Excel, no units or waveforms.

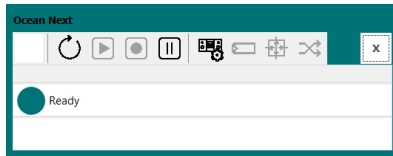
To connect to the workbook:

First go to Options in Quick Check and make sure that the checkbox "Fixed format (Excel connect)" is unchecked. This ensures that standard mode is used and data transferred is defined by the actual Quick Check:



1. Start Quick Check and Click on the **Connect to Excel** button:
2. Select **Connect to workbook**.

- Next step is to select which Excel workbook to use:
 - Open a new empty workbook
 - An existing workbook from file
 - A workbook already open on the computer
- Excel starts and loads the workbook you chose and the Excel control window is shown.



You can change basic meter settings and the left most button is used to switch between Quick Check and Excel. Read more here... (section "Excel control window").

- Place the cursor where you want the data from the next exposure to appear, for example in C3.

- Make some exposures, the value from the first column is put into cell C3, consecutive column values go into consecutive cells on the same workbook row as shown in the picture above.
- You can save your Excel workbook and further process your measured data.

You can disconnect the Excel workbook by clicking in the "x" in the upper right corner of the Excel control window.

15.4 Connect (Fixed format)

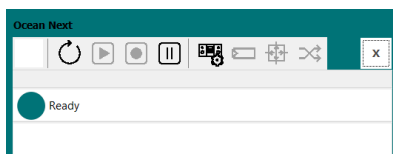
When this mode is used, data are transferred to Excel after each exposure. The format is compatible with the format used with Xi and X2 View from RaySafe. Same Excel templates can be used with none or minimal modifications. This mode is only available in Quick Check. It is activated by checking "Fixed format (Excel connect)" on the Option page (in Quick Check). The "Fixed format" is described below.

To connect to the workbook:

First go to Options in Quick Check and make sure that the checkbox "Fixed format (Excel connect)" is checked:



- Start Quick Check and Click on the **Connect to Excel** button:
- Select **Connect to workbook**.
- Next step is to select which Excel workbook to use:
 - Open a new empty workbook
 - An existing workbook from file
 - A workbook already open on the computer
- Excel starts and loads the workbook you chose and the Excel control window is shown.



You can change basic meter settings and the left most button is used to switch between Quick Check and Excel. Read more here... (section "Excel control window").

5. Place the cursor where you want the data from the next exposure to appear, for example in C3.

	A	B	C	D	E	F	G
1							
2							
3	2,6613 mGy	12,50708 mGy/s	0,212783 s				
4	2,158886 mGy	12,5061 mGy/s	0,172627 s				
5	2,143109 mGy	12,52362 mGy/s	0,171125 s				
6							

6. Make some exposures, the value from the first column is put into cell C3, consecutive column values go into consecutive cells on the same workbook row as shown in the picture above.
7. You can save your Excel workbook and further process your measured data.

You can disconnect the Excel workbook by clicking in the "x" in the upper right corner of the Excel control window.

Definition of the fixed format

There are four different detector combinations that each has its own fixed format:

- Multi-detector (internal detector) with an optional external detector
- Only an external radiation detector (Dose Probe, CTDP, T20, Ion chamber of any type)
- Only the Light detector
- Only a mAs probe

Multi-detector (internal detector)

Tube voltage
unit
Dose
unit
Dose rate
unit
Exp. time
unit
Pulses
unit
Empty
Empty
Pulse rate
unit
Dose/pulse
unit
HVL
unit
Tube mAs
unit
Tube mA
unit
TF
unit
Dose (ext.)
unit
Dose rate (ext.)
unit

Units are defined by Default units in Program options in Ocean 2014 (not available in Quick Check).

Only external radiation detector

Dose
unit
Dose rate
unit
Exp. time
unit
Pulses
unit
Empty
Empty
Pulse rate
unit
Dose/pulse
unit

Units are defined by "Default units" in Program options in Ocean 2014 (not available in Quick Check).

Only light detector

Lumunance or Illuminance
unit

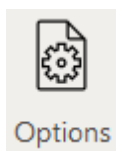
Units are defined by "Default units" in Program options in Ocean 2014 (not available in Quick Check).

Only mAs probe

Tube mAs
unit
Tube mA
unit
Exp. time
unit

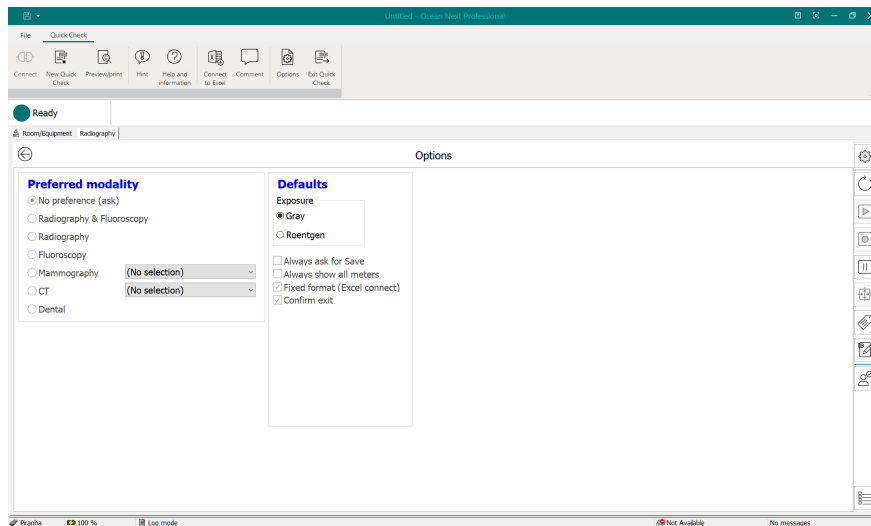
Units are defined by "Default units" set in Program options found on the Backstage Home page.

16 Quick Check Options



Click the **Options** button on the Quick Check ribbon bar and select "Options" from the menu shown.

The Quick Check options are shown:



There are two sections here, Preferred modality and Defaults.

Preferred modality

You can use this if you have a meter that covers many modalities but you don't want to see all choices in the Quick Check.

Defaults

Various settings that controls how Quick Check works.

Exposure unit: Select Gray or Roentgen

Always ask for Save: When this box is checked Quick Check always asks if you want to save your measurements before starting a new measurement or closing.

Always show all meters: When this box is checked a list with available meters to connect to is shown. If unchecked, Ocean 2014 directly tries to connect to the last used meter.

Fixed format (Excel connect): Check this box if you want to use fixed format when connecting to Excel.

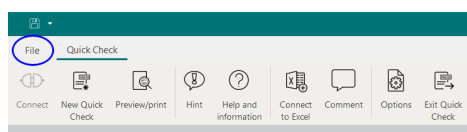
Confirm exit: If you check this a dialogue is shown when you quit Ocean 2014. It give you three alternatives:

- Quit Ocean 2014 and return to Windows
- Quit Ocean 2014 and turn off computer
- Resume Ocean 2014

Click on the **Back** button to close Options and return to the display panel.

17 Backstage

When you start Quick Check (Ocean Next) or click on the File tab you arrive to Ocean Next Backstage view. In the Backstage view you organize and work with your different documents. What type of documents you have depends on the license level. For QUICK you will only see "Quick Check measurements", while for ADVANTAGE and PROFESSIONAL you also will see sessions, session templates, report templates and more. The File tab is located in the upper left corner of the Quick Check (Ocean Next).



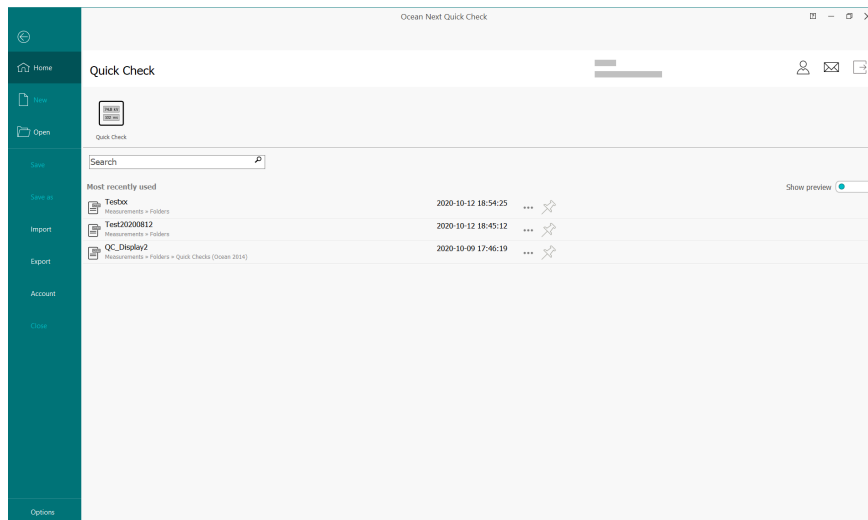
The Backstage view provide many basic functions like Open, Save, Import, Export and more.

Read more here:


- Home
- New
- Open
- Save As
- Import
- Export
- Account
- Options

17.1 Home

When you start Ocean Next, the first thing you see is the Backstage Home page.



It may look different on your screen depending on the license level you have. The picture here shows how it looks for license level QUICK. You see only the Quick Check button and only Quick Check measurements are shown in the "Most recently used" list. Different symbols are used for different type of documents, a Quick

Check measurement is shown with . It is possible to "pin" measurements to make them appear first in the list. If you want to see a preview of the measurement you can activate this with the **Preview** control

Show preview ☒

At the top of the screen to the right the following buttons are found:



When you click here you will get two options, "My profile" and "Logout"

- My Profile: Edit your profile and change password here.
- Logout: Exit Ocean and logout. Next time you must use your password to start Ocean.



Opens your mail box with your messages. There are new and unread messages if the red dot is shown.



Exit Ocean. You don't need to enter your username and password next time if you have selected "Keep me logged in" when you quit Ocean here.

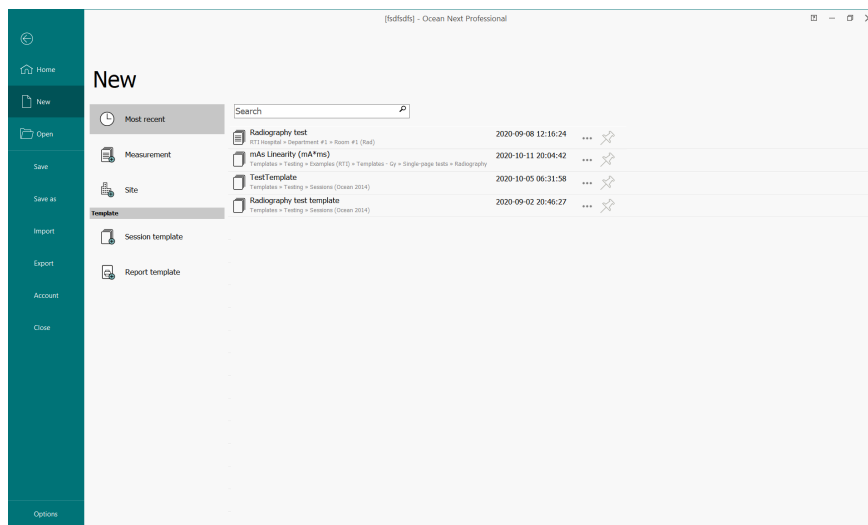
You may also see a warning that the recommended calibration time for the connected meter is due or soon will be:

Recommended calibration time for CB2-13060182 is due.



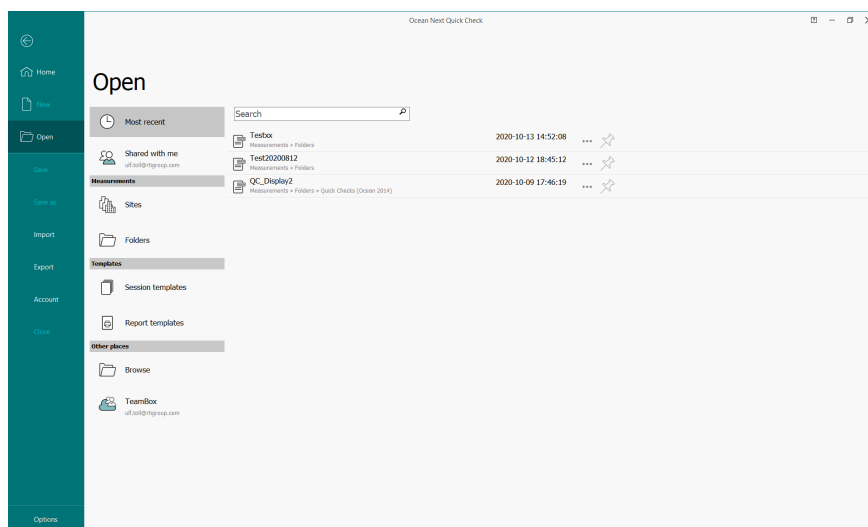
17.2 New

This page is only accessible if you have license level ADVANTAGE or PROFESSIONAL. From here you can start measurements with user-defined templates in the Studio. You can also, in this case, design templates that has several different pages, analysis with pass-fail criteria, change report format and much more. With PROFESSIONAL you can also create Sites in the "Site database".



17.3 Open

This Backstage page is used to open a measurement that has been saved earlier. If you have license level QUICK or ADVANTAGE, you only have access to "Folders". If you have PROFESSIONAL, you also can open Quick Check measurements that has been saved in the Site section.



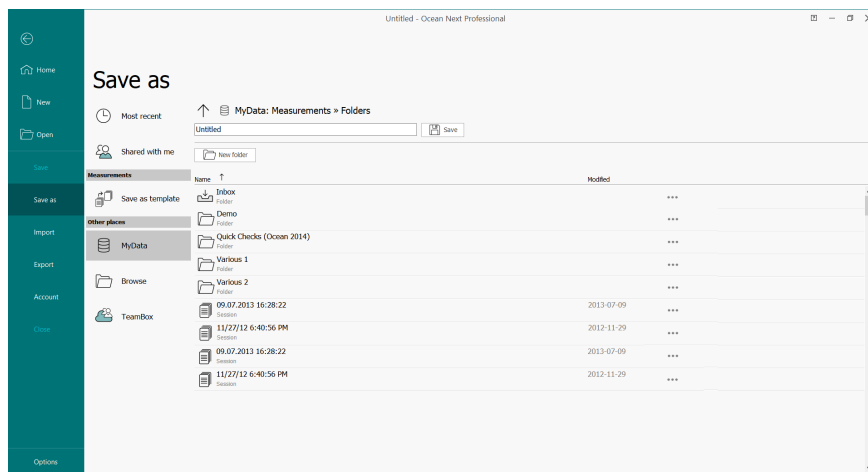
Make sure to have a meter and if applicable an external probe that comply with the saved measurement connected before you open the saved measurement. Locate the Quick Check measurement you want to open and select it. Quick Check starts and the selected measurement is opened. If the required capabilities (wrong meter or external probe) a dialog will be shown allowing you to reconfigure your meter and/or external probe.

The selection Sites, Session template and Report template are not all available unless you have license level PROFESSIONAL.

"Shared with me" and "TeamBox" are coming features, click on corresponding button to read more.

17.4 Save As

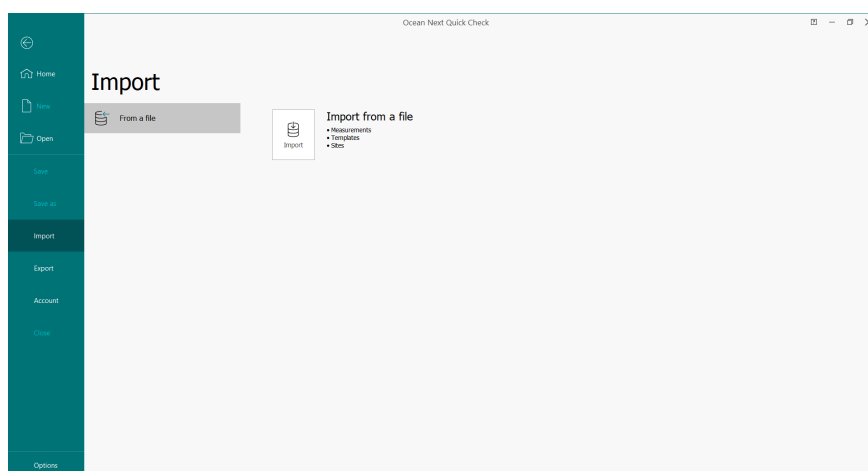
This Backstage page is used to save a measurement the first time. You arrive here if you click save and the measurement not yet has been saved:



Default place to save Quick Checks is "Folders". This is a place where you can create sub-folders and organize your measurements in your own way. If you have license level PROFESSIONAL you can click the uparrow and navigate further to a site and save your measurements in a room.

17.5 Import

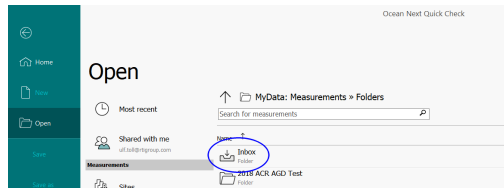
If you want to move measured data from one computer to another, an export and import function is available to you. Click on **Import** on the Backstage menu:



You can import a Quick Check measurement in the following way:

1. Click on the **Import** button.

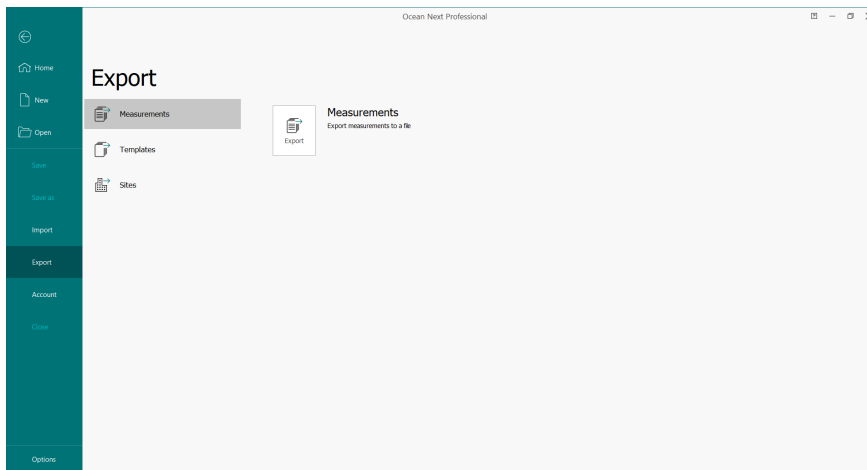
2. Locate the file you want to import (extension .ome).
3. A list will be shown with the measurements included.
4. Click finish to continue.
5. The imported measurements are now found in the Inbox:



It is possible to import any

17.6 Export

If you want to move measured data from one computer to another, an export and import function is available to you. Click on **Export** on the Backstage menu:



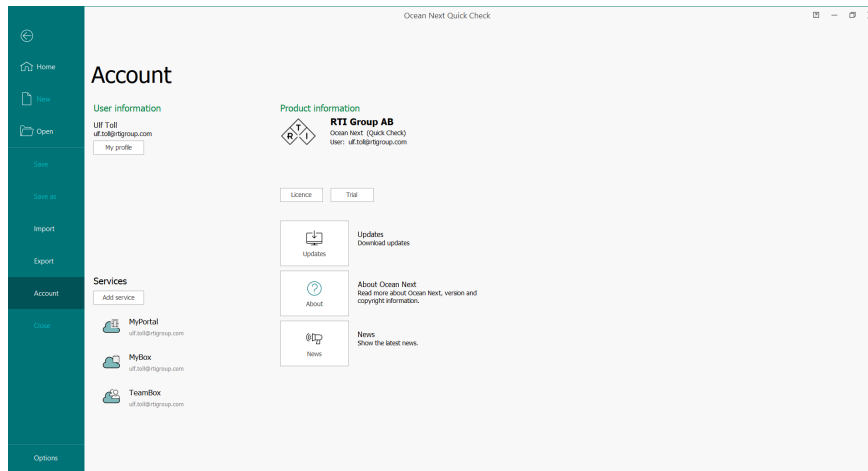
If license level is QUICK, only measurements can be exported in the following way:

1. Click on the **Export** button.
2. Select the measurements you want to export, double-click or use drag the files from the left side and drop them on the right side.
3. Click on **Next** when you have selected all the measurements you want to export,
4. Select "File" or "E-mail" ("E-mail" require that you have an e-mail program on your computer and internet access). If you select "File", chose a file name and the location where to save the export file.

The measurements can now be imported by any other user of Ocean Next with the same or higher version.

17.7 Account

This Backstage page gives access to various functions related to administration of your software from RTI Group.



User information

Here is your user information shown that you entered when you created your account. You can update all information except your username.

License

Here you can change the license level. This is normally not anything you need to do, however at special occasions it may be convenient to use this function, read more here... (section "License levels").

Trial

Here you can activate a 45 days trial of a higher license level, read more here... (section "Try a higher license level").

About

Here you can read information about Ocean Next.

News

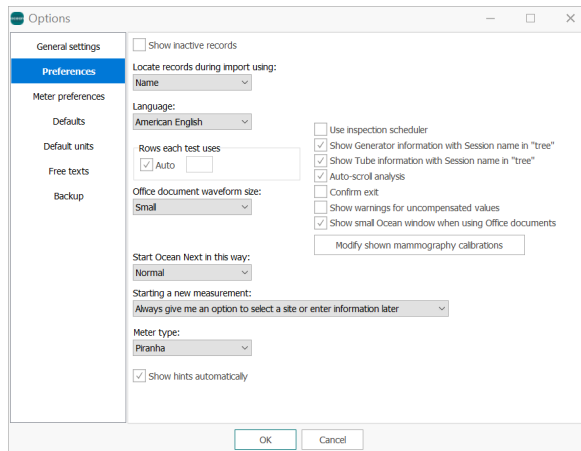
This button links you to the RTI Group webpage for the latest news.

Services: MyPortal, MyBox and TeamBox

Future functions, click the buttons to read what is coming from RTI Group in the near future.

17.8 Options

There are also settings in the general Options that affects Quick Check. Go to the Backstage (click on **File** at the top of the ribbon bar) and click on Options at the bottom of the Backstage menu.



Most of the settings here are only relevant for Ocean Next ADVANTAGE and PROFESSIONAL license levels, not QUICK. The following settings are relevant for Quick Check:

Preference

Start Ocean Next in this way: Normal or Quick Check

Normal : Ocean starts and the Backstage Home page is shown

Quick Check : Ocean starts and tries to start Quick Check directly.

Defaults

Reference **Temperature** and **Pressure** values for TP compensation of ion chambers.

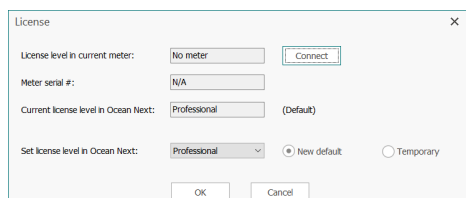
Backup

Configure when you want automatic backup to be done.

18 License levels

The license level is stored in the meter and Ocean Next will adapt accordingly. However, sometimes it may be desired to set a certain license level without a meter.

When you click **License** button on the Backstage Account page the following is shown:



In this case, not meter is connected. Click on the **Connect** button if you want to see the license level in the meter. Current license level is shown and there is a drop-down list "Set license level in Ocean Next" where you can chose another license level. You can specify if it shall be "New default" or "Temporary". The license level you set here will be used instead of the one stored in the meter as long as license level in the meter is "higher" or equal to the one you set here.

New default means that this level will always be used when Ocean starts, before you have connected to a meter.

Temporary means that Ocean will use the license level you specify only temporary and return to the default level when you start Ocean next time.

Description of license levels:

QUICK

- Only Quick Check can be used for measurements.
- Measurements can be saved.
- Printout of a fixed report.
- Basic Excel connection.

ADVANTAGE

- All functions available for QUICK.
- Measurements in the Studio.
- Measurements can be saved.
- User-defined templates, single-page sessions.
- Full analysis with user-defined pass/fail criteria.
- Print-out of a user-defined report
- Full Excel connection.

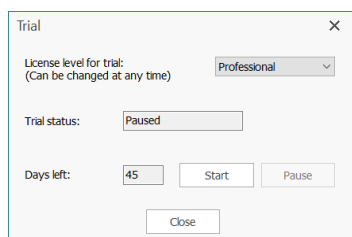
PROFESSIONAL

- All functions available in QUICK and ADVANTAGE.
- Site database for storage of measurements.
- Multi-page sessions.
- Trend analysis.

Contact RTI Group or any of the representatives if you want to upgrade to a higher license level. When you have purchased a higher level, your meter must be activated. Read more here...

19 Try a higher license level

If you are using license level QUICK or ADVANTAGE a trial function is available that makes it possible during 45 days to try a higher license. When you click the Trial button the following is shown:



You can choose license level for the trial and you can change as many times you want during your trial. You can also pause the trial if you want and your 45 days count is also paused.

You can read more here about the different license levels.

20 Make a Support file

You can always contact the RTI Support if you encounter a problem. The RTI Support can be reached by e-mail or phone:

E-mail: support@rtigroup.com

Phone: +46 31 746 36 28

1. First visit our website and see if you can find a solution here: <https://rtigroup.com/rti-support/>.
2. Get in contact with our Support. Make sure to have the following information:
 - If you have problem with a measurement or template, save it, export it and send it to RTI Support.
 - Supply a good description, step-by-step on how to reproduce the problem or specify that it is an intermittent problem.
 - Make a "Support file"

How to make a Support file:

After a problem has occurred:

In Quick Check: Click on the **Options** button and select "Make Support file". You can send it directly if you have a mail program on the computer you use, otherwise select Save.

In the Studio: Go to the Ribbon bar Help page and click on the **Contact RTI** button and select "Make Support file".

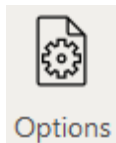
21 Activate meter



Click the **Options** button on the Quick Check ribbon bar and select "Activate meter" from the menu shown if you want to upgrade to a higher license level. Enter the license key you received when you purchased the new license level in the dialogue shown:

Click "OK" and restart Ocean Next.

22 Check for updates




Click the **Options** button on the Quick Check ribbon bar and select "Check for updates" from the menu shown. A dialogue shows status:

You can read more about the latest release if you click on "Read more" (only if you have Internet access).

23 Show error reports




Click the **Options** button  on the Quick Check ribbon bar and select "Show error reports" from the menu shown. The file browser is opened and shows the folder where Ocean Next stores all error reports that are automatically created.

24 Backup


Create a backup



Click the **Options** button  on the Quick Check ribbon bar and select "Backup" from the menu shown. The file save dialogue is shown, locate the folder where you want to save your backup and save it.

Restore a backup



Click the **Options** button  on the Quick Check ribbon bar and select "Restore from backup" from the menu shown. The folder where automatic backups are stored will be shown, you can select a database here or browse and select another backup to restore.

Warning!

Restoring the database will overwrite current database.

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