# RaySafe i2

## Specifications

# i2 DOSIMETER

The RaySafe i2 dosimeter measures and records dose and dose rate every second. Data is wirelessly transferred via radio to the i2 real time display. Accumulated dose is stored in the dosimeter by hour for 5 years and the dose rate is stored by second for the last hour of exposure. It is maintenance free and the expected dosimeter life time is 3 to 5 years dependent on use. The i2 dosimeter shall be worn outside lead apron for best online dose rate performance. It can be personalized with different colors and names.

# i2 REAL TIME DISPLAY

The RaySafe i2 real time display is a 10.4" touch screen which is placed in the examination room. It shows real time dose exposure from all dosimeters in range, up to eight at a time. Color indication bars (red, yellow, green) represent dose rate levels with a logarithmic scale. The accumulated dose per individual user is displayed next to the color indication bars.



# i2 REAL TIME DISPLAY FEATURES

By tapping the dosimeter name on the touch screen, more detailed information about the personal dose history can be accessed:

1. A dose dashboard with total dose history and trip meters

2. Annual dose in number and in relation to a configurable yearly limit

3. Detailed views presenting time stamped dose history

# RAYSAFE i2 OVERVIEW



## RAYSAFE i2 DOSE VIEWER

The RaySafe i2 dose viewer software is used for administrating dosimeters and viewing personal dose information while connected to RaySafe i2 cradle. The software allows you to view dose data history, change dosimeter names and colors and reset dose history.

## RAYSAFE i2 DOSE MANAGER

The RaySafe i2 dose manager is advanced software for analyzing, reporting and archiving dose information. In addition to i2 dose viewer's features, i2 dose manager handles multiple dosimeters and can retrieve the dose information from multiple real time displays through the hospital network or via USB storage.

# SELECTED SPECIFICATIONS

**DOSIMETER**

| | |
|---|---|
| **WEIGHT** | 30 g (1.06 ounces) |
| **OPERATIONAL QUANTITY** | $H_p(10)$ |
| **X-RAY DOSE RANGE** | 1 µSv – 10 Sv |
| **X-RAY DOSE RESOLUTION** | 1 µSv |
| **X-RAY DOSE UNCERTAINTY** | 5% or 1 µSv |
| **X-RAY DOSE RATE RANGE AND LINEARITY** | +/- 10% 40 µSv/h – 150 mSv/h |
| | +/- 20% 150 mSv/h – 300 mSv/h |
| **ENERGY RANGE X-, γ-RAYS** | N40 – N120 (33 keV – 101 keV) |
| **AVERAGE DOSIMETER LIFETIME** | 3 – 5 years, depending on daily use |

**REAL-TIME DISPLAY**

| | |
|---|---|
| **DOSE UNIT** | Sv or rem |
| **DIMENSIONS** | 300 x 250 x 60 mm |
| | 11.8 x 9.8 x 2.4 inch |
| **WEIGHT** | 1 240 g (43.74 oz) |
| **DISPLAY** | 10.4" touch screen |
| **RESOLUTION** | 640 x 480 pixels |
| **STORAGE** | Dose rate by second and accumulated dose by hour for dosimeters in range. For 50 dosimeters the memory size allow storage of up to 5 years accumulated dose and dose rate for the last 250 hours of exposure each. |
| **COMMUNICATION** | Wireless radio communication with dosimeters |
| **ETHERNET** | 10/100 Mbit/s port for the dose manager connection |
| **POWER SOURCE** | The real time display uses a power supply connected to 120 V/230 V |

# SOFTWARE REQUIREMENTS

**DOSE MANAGER PC**

| | |
|---|---|
| **OPERATING SYSTEM** | Windows 7, Vista or XP |
| **OPERATING MEMORY** | At least 2 GB |
| **HARD DISK SPACE REQUIREMENT** | 40 GB with at least 15 GB available space |
| **USB CONNECTION** | One available 2.0 port |

**DOSE VIEWER PC**

| | |
|---|---|
| **OPERATING SYSTEM** | Windows 7, Vista or XP |
| **OPERATING MEMORY** | At least 1 GB |
| **USB CONNECTION** | One available 2.0 port |

## ORDER i2 SYSTEM

**4 DOSIMETERS**
**1 REAL TIME DISPLAY**
**1 CRADLE**
**1 DOSE VIEWER SOFTWARE**
**1 RACK**

## ORDER OPTIONS

**ADDITIONAL DOSIMETERS**
**DOSE MANAGER SOFTWARE**
**RACK**

RaySafe™