

Dosimeter Reader



User's Guide



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Contents

1 Read before Operating	4
2 Warnings.....	4
3 Regulatory Compliance.....	4
4 Dosimeter Reader Features	7
5 General Information	8
6 Operation.....	10
6.1 Powered on/off	10
6.2 Build connection with DoseRAE Pro.....	10
6.3 Relay data between DoseRAE Pro and ProRAE Dosimeter.....	12
7. Specifications*	13
8 Technical Support.....	15
9 RAE Systems Contacts.....	16

Dosimeter Reader User's Guide

1 Read before Operating

This manual must be carefully read by all individuals who have or will have the responsibility of using, maintaining, or servicing this product. The product will perform as designed only if it is used, maintained, and serviced in accordance with the manufacturer's instructions.

2 Warnings

For safety reasons, this equipment must be operated and serviced by qualified personnel only. Read and understand the user manual completely before operating or servicing.

Dosimeter Reader User's Guide

3 Regulatory Compliance

FCC Part 15 Class A Equipment

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Information for User

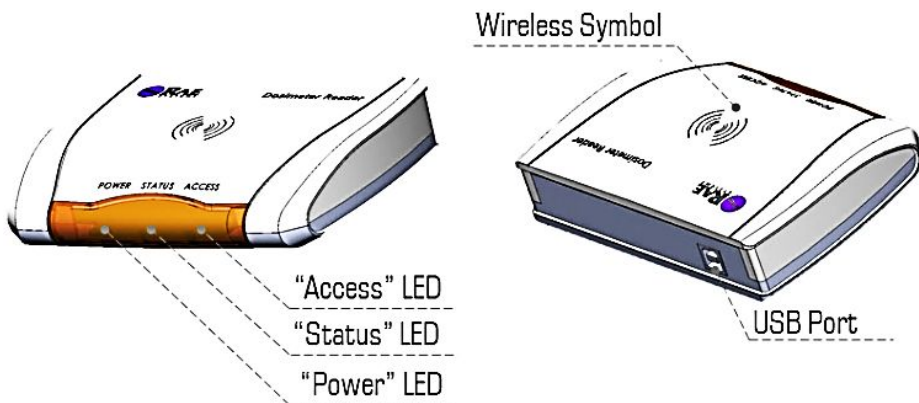
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user

Dosimeter Reader User's Guide

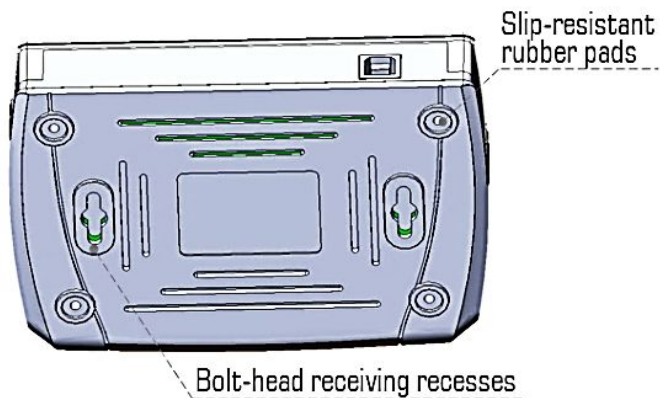
can reasonably be expected to have the capability to access information in that form.

Dosimeter Reader User's Guide

4 Dosimeter Reader Features



Front View



Rear View

5 General Information

The Dosimeter Reader PRR-1 is a specially designed supporting electronic device for DoseRAE Pro dosimeters. It communicates with the dosimeters in pass-by and short range data exchanges in a wireless manner, for configuring, activating, and diagnosing the dosimeters via the PC-installed software, ProRAE Dosimeter V2.00 or higher versions. The PRR-1 has three visual indicators for showing its operation statuses and a USB port for enabling data exchanges with PC via a USB cable. In addition, it also has bolt-head receiving and slip-resistant features for being mounted on wall or reducing slippery when placed on a desk surface.



Dosimeter ReaderUser'sGuide

Key Features

- NFC (13.56MHz) contactless smart reader
- Multi-functions in one, including configuration and diagnosis of DoseRAE Pro dosimeters
- User and product identification or authentication
- Three LED lights indicating whether the reader is powered on, ready for and currently in data communications, respectively
- Power supply by PC via a USB cable
- Compact size(140mm×100 mm×30mm, 5.5"×4.0"×1.2")
- Lightweight (120 g or 4.2 oz)
- Comply with FCC part 15 and EN 300 330-2 V1.5.1, EN 301 489-1 V1.9.2 and EN 301 489-3 V1.4.1, CE R&TTE Directive 1999/5/EC (Article 3.1b and 3.2)

Standard Kit

- Dosimeter Reader unit
- USB cable
- User' Guide

6 Operation

When operating, the Dosimeter Reader PRR-1 links a DoseRAE Pro dosimeter and ProRAE Dosimeter to enable the software to:

- Read out and set parameters from and for the dosimeter
- Upgrade firmware for the dosimeter
- Identify user ID or instrument ID
- Diagnose the dosimeter
- Download data from the dosimeter
- Clear or reset dose history for the dosimeter.

6.1 Powered on/off

Dosimeter Reader PRR-1 is powered by a PC through a proper USB cable (e.g., the one provided with the standard kit) with one end inserted into the square USB port of the reader and the other end into a standard (rectangular) USB port of the PC. When connected to a PC, the “Power” LED (red) is on, indicating the reader is power on, and vice versa.

6.2 Build connection with DoseRAE Pro

When a DoseRAE Pro unit is loaded on the top surface of the Dosimeter Reader PRR-1 (preferable, on a center portion of the top surface where the wireless symbol is

Dosimeter ReaderUser'sGuide

marked, referring to the following image),the“Access” LED (green) is on, indicating that the reader has sensed,and built a connection with,the DoseRAE Pro dosimeter.



6.3 Relay data between DoseRAE Pro and ProRAE Dosimeter

When there are data exchanges between the dosimeter and the software, the “Status” LED flashes in green frequently.

Dosimeter Reader User's Guide

7. Specifications*

Data Transmission	Near Field Communication (NFC, 13.56MHz)
Transmission Distance	< 3cm
Response	< 3s
Operation status Indicators	Three LEDs: Power - the reader is powered on; Status - data exchanges between the DoseRAE Pro dosimeter and ProRAE Dosimeter software; Access - the reader has sensed and built a connection with the DoseRAE Pro dosimeter
Communications with PC	USB
Management Software	ProRAE Dosimeter V2.00 or higher versions
Power supply	PC via a USB cable; Voltage: $5V_{DC}$;
Power consumption	< 600 mW

Dosimeter ReaderUser'sGuide

Dimensions	140mm×100mm×30mm (5.5"×4.0"×1.2")
Weight	120g (4.2 oz)
Environmental	Operating Temperature: -20° to +50°C Storage Temperature: -30° to +85°C Humidity: < 95%RH (non-condensing)
Certification	FCC: Part 15 CE: EN 300 330-2 V1.5.1, EN 301489-1 V1.9.2 and EN 301 489-3 V1.4.1, the R&TTE Directive 1999/5/EC (Article 3.1b and 3.2)

** Specifications are subject to change*

Dosimeter ReaderUser'sGuide

8 Technical Support

To contact RAE Systems Technical Support Team:

Monday through Friday,
7:00AM to 5:00PM Pacific (US) Time

Phone (toll-free): +1 888-723-4800

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