



raditeq

Product Manual

RadiPower[®]

RF Power Meter



Models:
RPR4006R

www.raditeq.com



RadiPower® product manual

This product manual refers to the RadiPower® pro series.

Models: RPR4006R

Made by Raditeq B.V.

Carefully read the content of this manual before operating the product and make sure all the safety instructions are strictly followed.

For your convenience, a Quick Start Guide has been added to this product. This Quick Start Guide contains the basic start-up steps and main safety warnings.

Please keep the Quick Start Guide (and this regular manual) close at hand when you operate your new Raditeq product(s).

Please contact your local reseller if you have any questions.

Supplier Information

Raditeq B.V.

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3447 GX, Woerden
The Netherlands

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Internet: www.raditeq.com
Email: support@raditeq.com

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WARNINGS & PRECAUTIONS



Read the contents of this product manual carefully and become familiar with the safety markings, the product instructions and the handling of the system. Please refer to the applicable product manual(s) for further information regarding the operation and control of the product(s).



Only Raditeq qualified maintenance personnel is allowed to perform maintenance and/or repair service on the equipment.



This product® contains materials that can be recycled and reused to minimize material waste. At the 'end-of-life', specialized companies can dismantle the discarded system to collect the reusable and recyclable materials. If your product is at its 'end-of-life', please return it to your local reseller or to Raditeq for recycling.



For cleaning, use a clean, dry cloth (or a damp cloth where needed) and wipe the surface of equipment.



This product contains no hazardous substances as described in the RoHS Directive (2011/65/EU).



This Product contains embedded software, which is (stand-alone) upgradeable using the RadiMation® Software.

Introduction

This manual contains information about the RadiPower® RPR4000 Pro series range of RF power meters.

An accurate power meter is indispensable to perform reliable EMC measurements. The RadiPower® 4006R Pro is a RF power meter especially designed for power measurements during EMC tests. The RadiPower® is an affordable, accurate and fast power meter. It provides accurate RMS measurements over a wide frequency range, which enables effective measurements in accordance with the latest EMC standards.

Each RadiPower® RF power meter has an USB port that allows direct connection and control from any Microsoft® Windows PC.

Please read this manual carefully and make sure to pay special attention to the chapters regarding your new product(s).

RadiMation® Software

RadiMation® is the brand independent EMC automation software from Raditeq. RadiMation® places the EUT in the center. The software is designed to perform all EMC tests required to certify an EUT. As a result, the test data of all different tests is collected in one single software package, allowing fully automated report generation.



Our advanced report generation tool streamlines the process of creating test reports following EMC (Electromagnetic Compatibility) tests. With its user-friendly interface and efficient functionality, generating a comprehensive test report has never been easier. By simply pressing a single button, the tool automatically compiles all the necessary data and formats them into a professional and organized report.

This automation significantly reduces the time and effort traditionally required to manually compile and format test reports. Our tool ensures consistency and accuracy in report generation, minimizing the risk of errors or omissions.

Furthermore, the report generation tool supports the inclusion of all relevant graphs, charts, tables, and explanatory notes to provide a comprehensive understanding of the test results.

By simplifying the report generation process, our tool empowers EMC test engineers to focus more on their core tasks, such as analyzing results and implementing mitigation strategies if necessary. This improves overall productivity and efficiency in the testing workflow, enabling faster turnaround times for delivering test reports to clients or internal teams.

Device drivers for all main manufactures are freely made available or are made for free when required, as long as the equipment is standard commercially available and still supported by the original manufacturer. This allows you choose the best suited EMC test equipment for each specific application, instead of being locked in by a vendor.



The RadiPower® 4000 Series



The RadiPower® RF power sensor

Model: RPR4006R

True RMS Power Meter for measurements of (non) sinusoidal signals.



Shielded USB cable

Model: USB A male to Mini USB

Used to connect the RF power sensor with the PC.

Standard delivered with USB stick containing the following documents:

- The user manual and Quick Start Guide.
- The installation of RadiMation® Free software and drivers.
- Optional - The calibration certificate for the power meter (if a calibration was requested).

Theory of operation

The RadiPower® RPR4006R incorporates a hardware RMS detector, enabling direct measurement of (non)-sinusoidal signals with exceptional accuracy. This advanced feature eliminates the need for additional signal processing or waveform assumptions, making it a versatile device for a wide range of applications.



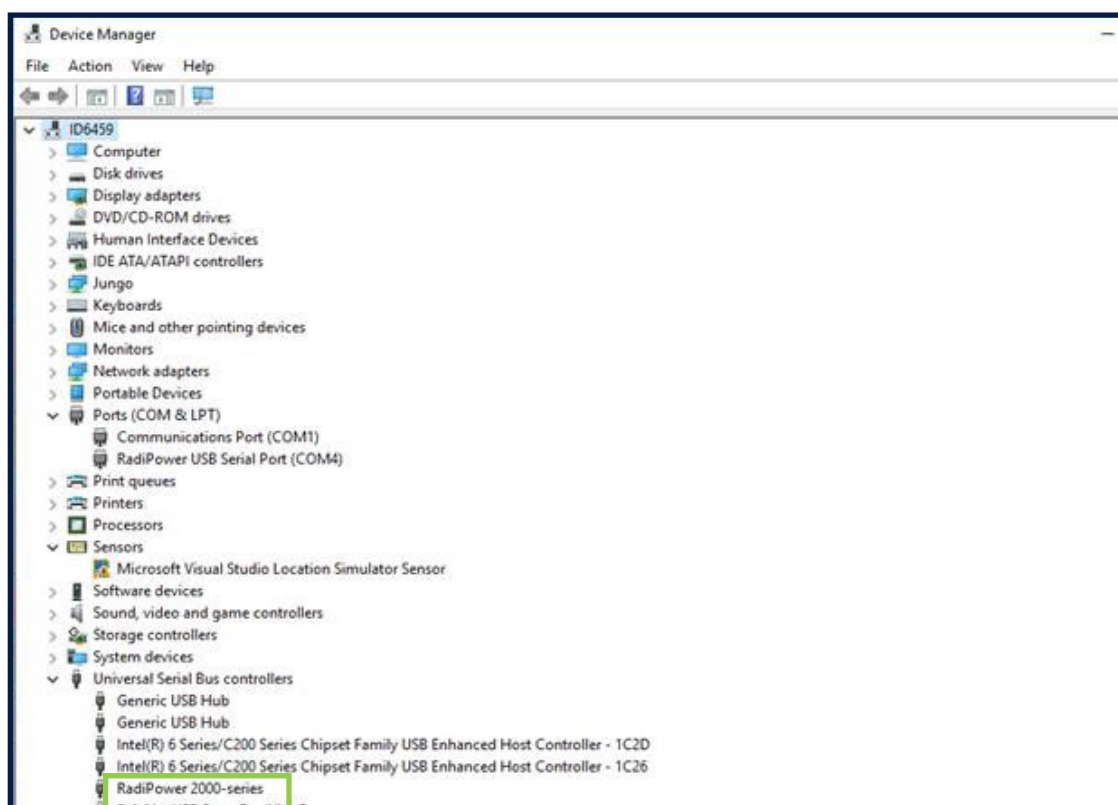
RadiPower® Installation

Stand-alone Configuration

Connect the RadiPower® sensor to a Windows computer with a USB 2.0 port (USB 3.0 preferred). Use the supplied USB cable to connect the RadiPower® sensor. The hardware installation for the RadiPower® sensor is now complete.

Connect the RadiPower® sensor to a Windows computer with a USB port for 'stand-alone' use. Use the supplied USB cable to connect the sensor to your computer. Windows will prompt that new hardware has been found. The USB-driver for the RadiPower® is Windows certified and will be loaded automatically from the Windows update. If the drivers are not loaded automatically, these can be installed manually from the supplied USB-key. Follow the normal instructions from Windows to install the drivers manually.

Once the drivers are loaded successfully, the RadiPower® will be shown in the device list.



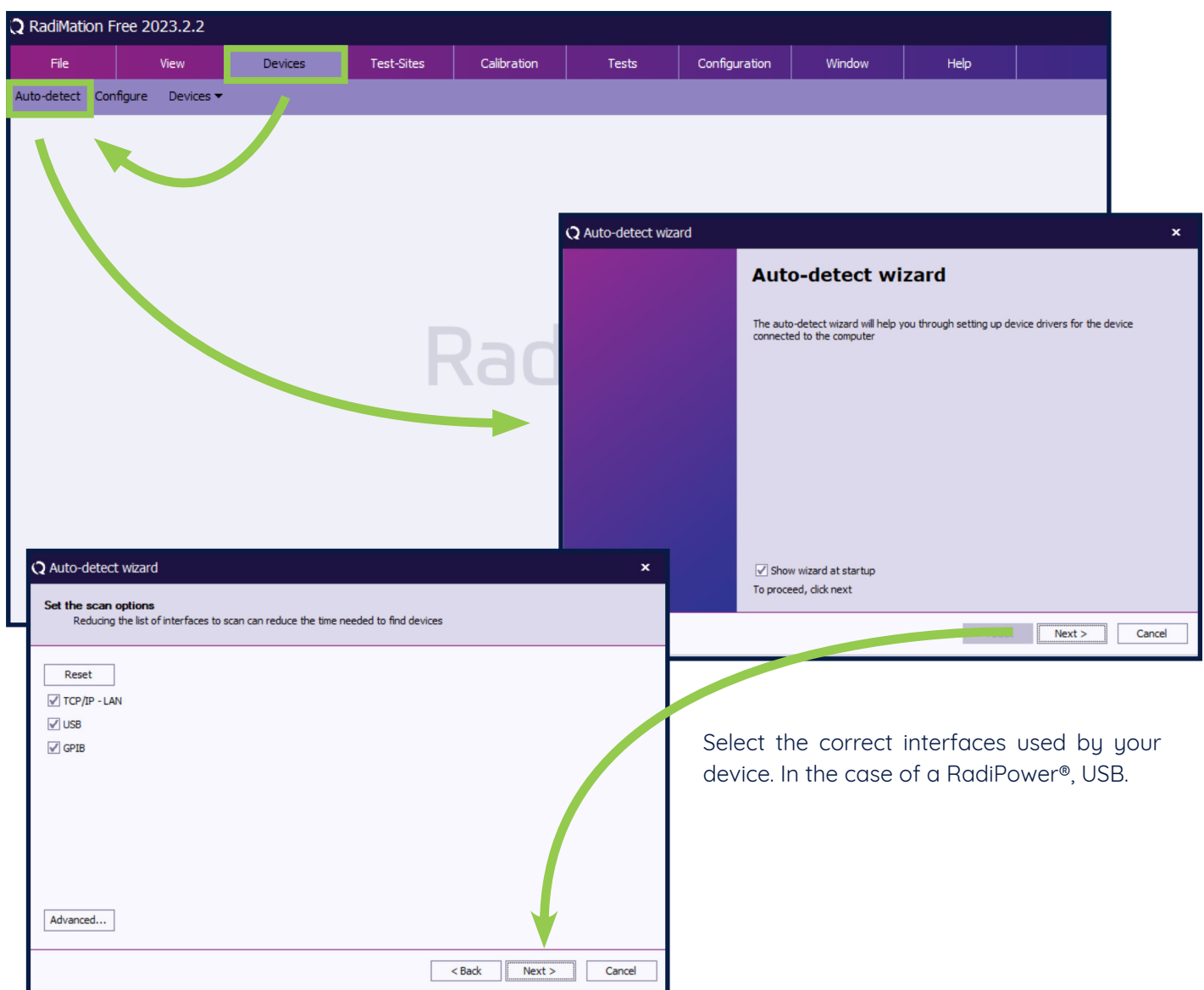
Software Configuration

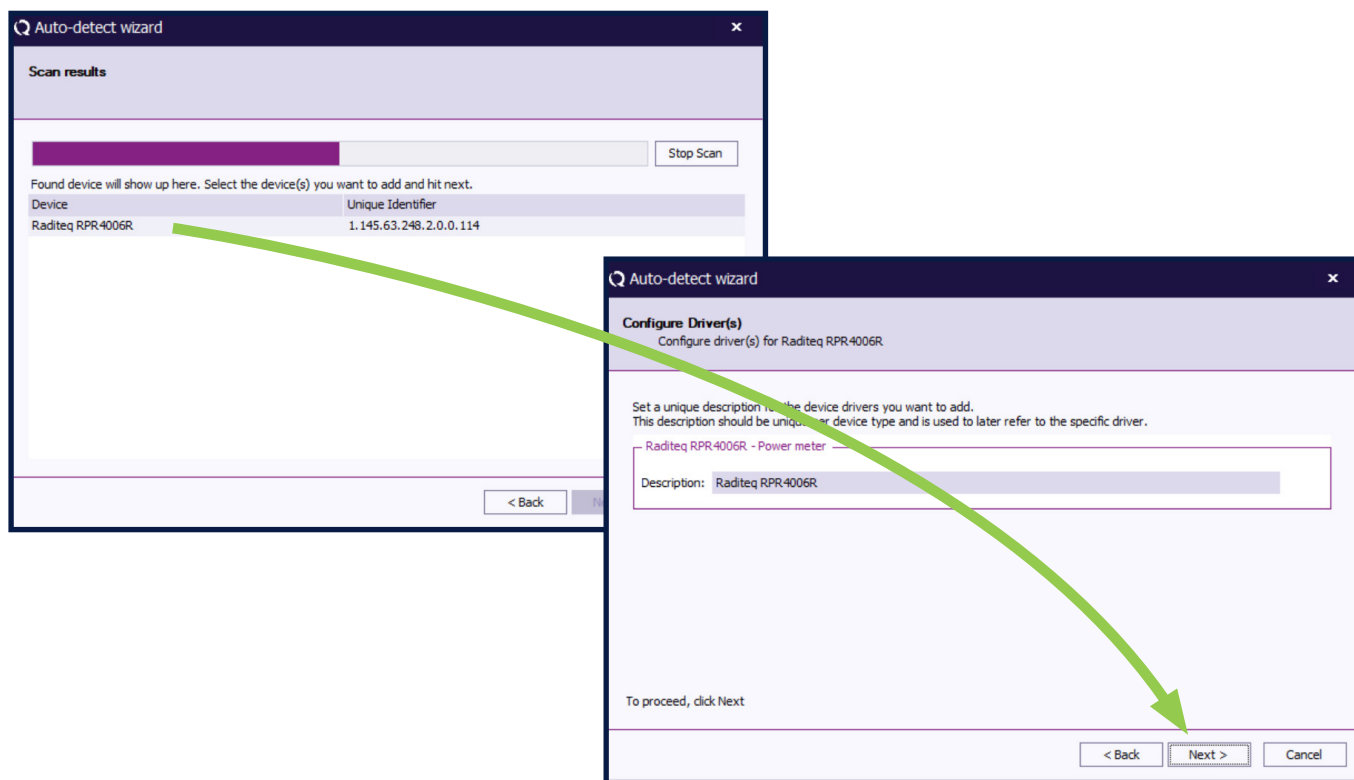
In order to control the RadiPower® from a computer, the RadiMation® EMC software package can be used. RadiMation® from Raditeq is sold separately. **A free-ware version of RadiMation® is available on:**

<https://www.raditeq.com/automated-emc-software/radimation-free/> If the RadiPower® is operated manually, this chapter can be skipped.

RadiMation comes after version 2022.2 with an auto-detect feature. This makes it possible to automatically detect Raditeq (and other hardware) and configure it.

The auto-detect starts when you first download and install RadiMation. Or click Devices -> Auto-detect.





After clicking “All Settings On”, press continue till the auto-detect wizard completes, then select (all) Devices to add them to your configuration. For more information and an instructional video go to:

<https://www.raditeq.com/radimation-auto-detect-feature/>

Warranty Conditions

Raditeq B.V. offers a standard warranty term of three (3) years on their products, calculated from the shipping date, under the condition that the product is registered on www.raditeq.com. For registration of the product, the customer should provide the product model, serial number and the responsible reseller (if applicable). If the product is not registered, a limited warranty term of one (1) year will be applicable.

Return Material Authorization (RMA) & Warranty repair

If a defect occurs to our product within the warranty term, a Return Material Authorization (RMA) 'Warranty Repair' request can be issued using the RMA link at www.raditeq.com/support. Upon receipt of the request, an RMA number will be provided. Please do not send the product without this RMA number! The defective product should be shipped to our service department at the following address:

Raditeq B.V. – Service Department
Vijzelmolenlaan 3
3447GX WOERDEN
The Netherlands

There will be no charge for repair services (materials or labour) within the (extended) warranty term.
These warranty terms are not applicable to:

- Normal wear and tear
- Fibre optic cables
- Products that have been improperly used
- Products that have been used outside their specified range
- Products that have been improperly installed and/or maintained
- Products that have been modified without approval of Raditeq
- Calibration and/or re-calibration of the product

Repair services on products that are not covered by the Raditeq warranty will be charged to the customer.

Repairs outside warranty

If a defect is not covered under warranty, an RMA fixed-repair can be ordered on the RMA link: www.raditeq.com/support.
If a re-calibration is needed after repair, this calibration should be ordered separately. The calibration will be performed at the ISO17025 accredited calibration laboratories of DARE!! Calibrations, based on the applicable service code / prices.

Warranty after repair

For repairs outside the original warranty period, a limited warranty of six months is applicable on the performed repair. Shipping conditions are the same as with repairs that are covered within the original warranty period.

Shipping

The customer will need to arrange shipping and cover for the costs (like e.g. transportation costs, duties, taxes) for sending the defect product the service department of Raditeq in The Netherlands. Raditeq will arrange the courier and cover for the costs for the return shipment after repair.



EU Declaration of Conformity

We

Raditeq B.V.

of

Vijzelmolenlaan 3
NL-3447GX Woerden
The Netherlands

declare under our sole responsibility that the

Product: RadiPower® Series
models: RPR4006R

are in accordance with the European directives:

EMC Directive 2014/30/EU
Low Voltage Directive 2015/35/EU
RoHS Directive: 2015/863/EU

per the provisions of the applicable requirements of the following harmonized standards:

Emission: EN 61326-1:2013, Class A1
Electrical equipment for measurement, control and laboratory use.

Immunity: EN 61326-1:2013, Industrial level, performance criteria A
Electrical equipment for measurement, control and laboratory use.

Safety: EN 61010-1:2010, Safety requirements for electrical equipment
for measurement, control, and laboratory use

The technical construction files are maintained at the adress specified above.

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Title of authority: Director



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