Quick Start Guide

Anritsu PowerXpert™ and USB Power Sensors

MA24105A, Inline Peak Power Sensor
350 MHz to 4 GHz

MA24106A, True-RMS Power Sensor
10 MHz to 6 GHz

MA24x08A, True-RMS Power Sensor
10 MHz to 8 GHz

MA24x18A, True-RMS Power Sensor
10 MHz to 18 GHz

MA24126A, True-RMS Power Sensor
10 MHz to 26 GHz

MA24330A, CW USB Power Sensor
10 MHz to 33 GHz

MA24340A, CW USB Power Sensor
10 MHz to 40 GHz

MA24350A, CW USB Power Sensor
10 MHz to 50 GHz
1. Introduction

This Quick Start Guide provides information on installing the Anritsu PowerXpert™ application and the MA24105A, MA24106A, MA24108A, MA24118A, MA24126A, MA24208A, MA24218A, MA24330A, MA24340A, and MA24350A, power sensor drivers. Included are instructions for making basic power measurements. It contains the following sections:

- “PowerXpert Installation Program” on page 1-1
- “Hardware and Software Requirements” on page 2
- “Installing PowerXpert” on page 3
- “Basic Power Measurement” on page 7

2. PowerXpert Installation Program

Installs the user interface to the power sensor via USB connection to a PC.

Microsoft® .NET Framework Version 4.0 Installation Program

Available for installation if .NET Framework does not already exist on your PC. The PowerXpert installation program will detect whether or not this is already on your PC and will provide a message if it is not installed. PowerXpert needs .Net Framework 4.0. This framework version is included in both Minimal & Full version of installers. The difference between minimal & full is that the minimal installer uses a light weight web installer of .NET 4.0; therefore, PowerXpert requires the internet connection in order to make the installation. Full installer uses complete .NET 4.0 setup and does not need an internet connection to make the installation.

User Guide

The User Guide contains instructions for installation, operation and operational testing for all the USB power sensors and the PowerXpert application.
3. Hardware and Software Requirements

Product Brochures and Technical Data Sheets

For the latest updates on Product Brochures and Technical Data Sheets, visit us at https://www.anritsu.com/en-US/

Measurement Uncertainty Calculator

Microsoft Excel® tool for calculating power uncertainty. It contains two tabs:

- One that provides measurement uncertainty for each sensor (selectable from a drop-down menu).
- One that provides additional uncertainty components and calculated values for the MA24105A Peak Power Sensor.

Sample C# Program Folder

Provides a link to a folder containing a sample application (DemoApp.exe) written in Microsoft C#. This application and its code are provided as an example so the user can develop custom applications for use with the power sensor. Instructions for use of DemoApp are included in Appendix A of the User Guide.

3. Hardware and Software Requirements

Please make sure that the following minimum requirements are met for installing and using the software:

- Intel® Pentium® III with 1 GB RAM or Intel® Pentium® IV with 512 MB RAM, or equivalent (Intel® Pentium® IV with 1 GB RAM recommended; a dual core processor with 2 GB RAM is recommended for use with the multi-sensor feature.)
- All versions of Microsoft® Windows 8, Windows 8.1, Windows 7 and Windows Vista®, Windows XP. Check the TDS of your power sensor to confirm the compatibility of your operating system.
- 100 MB hard-disk free space
- Display resolution 1024 × 768
- High speed USB 2.0 for MA242x8A and MA243x0A sensors
4. Installing PowerXpert

Both the PowerXpert application and power sensor drivers must be installed before using the power sensor. Follow the steps below as a guide for proper installation.

1. Download the latest PowerXpert Analysis and Control Software from the Anritsu Website: https://www.anritsu.com/en-US/

2. Click **Install Anritsu PowerXpert™** and select **Run** to start the installation.

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**Figure 1.** Anritsu PowerXpert Installation
3. Click **Next** in the following screen to begin the installation process. Select Install PowerXpert.

4. Select Modify, then select Next.
5. Read the license agreement and select “I accept the terms of the license agreement” to continue, then click Next.

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**Figure 4.** PowerXpert License

6. Setup will install PowerXpert in the following folder: C:\Program Files (x86)\Anritsu\PowerXpert. Refer to Figure 5.

7. To install to this Folder click next. To install to a different folder, click Browse and select another folder.

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**Figure 5.** Destination Folder
8. Select **Finish** to complete the software installation. The software installs to the selected location.

![Image](image1.png)

**Figure 6.** Installing Anritsu PowerXpert Application

9. The next screen **Figure 7** indicates the installation is now complete.

![Image](image2.png)

**Figure 7.** Anritsu PowerXpert Installation Complete
5. Basic Power Measurement

1. Connect the sensor to a computer as shown in Figure 8 on page 8.

2. Open the Anritsu PowerXpert application.

3. Zero the power sensor by clicking the **Zero** sensor button in PowerXpert.

   **Note**
   When removing a sensor from the PC’s USB port, wait 5-10 seconds before re-inserting the sensor or inserting a different sensor.

   **Warning**
   To prevent connector damage and inaccurate measurements, inspect and clean the sensor RF connector and the RF connector to which it will be attached.
   Do not turn the sensor body when mating the connectors.
   Use a properly calibrated torque wrench to tighten the connection. Do not over-torque.

4. Connect the RF source to the RF IN port of the power sensor.

5. Read the power measurement from the Anritsu PowerXpert application window (power readings are continuous with the default settings).
5. Basic Power Measurement

Index Description
1 RF Source
2 RF In
3 RF Out
4 MA24105A
5 Load
6 PC with Anritsu PowerXpert Application
7 Optional Attenuator
8 MA24106A, MA24x08A, MA24x18A, MA24126A or MA243x0A
9 To PC USB input

Figure 8. Basic Measurement Setup
Anritsu utilizes recycled paper and environmentally conscious inks and toner.