



TA Instruments Installation Requirements for Rubber Testing Products

Notice

Thank you for ordering a Rubber Testing Product from TA Instruments. To ensure that installation of your system goes as smoothly as possible and has you ready to start evaluating your sample materials as quickly as possible, we are providing the attached installation information. It includes details regarding laboratory space, power, and auxiliary requirements, as well as configuration requirements for the controller (computer). Please review this information carefully and take any appropriate actions prior to the installation date. To avoid unnecessary delays, and/or additional charges, please ensure that the requirements specified in this document are met before your TA Instruments Service Representative arrives. Contact your local TA Instruments Representative if you have any questions.



To arrange for installation of your system, contact our U.S. Service Department (302-427-4050) or your local TA Instruments Service Representative.

Important: TA Instruments Manual Supplement

Please refer to the *TA Manual Supplement* to access the following important information supplemental to this document:

- TA Instruments Trademarks
- TA Instruments Patents
- Other Trademarks
- TA Instruments End-User License Agreement
- TA Instruments Offices

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Requirements for the Controller (Computer)

A working Rubber Testing Product (RTP) system consists of one or more measurement instruments and a computer configured with appropriate TA Instruments software (this latter combination is subsequently referred to as a controller). As a customer, you have two alternatives for configuring a controller. You can either purchase a computer and have it configured by a TA Instruments Service representative, or you can purchase a suitable computer on your own to be configured by a TA Instruments Service representative at your site. In either case, the general requirements which follow are the same.



In situations where you are supplying the computer, it is assumed that you have reviewed these requirements and suitably prepared the controller prior to the scheduled system installation by the TA Instruments Service Representative. In fact, you will be required to provide hardcopy verification of your system setup using the instructions on page 5 before an installation visit will be scheduled.

Before installing the TA Instruments software, you should ensure that the computer system meets the following specifications:

Table 1 Computer Requirements

Description	Requirement
Operating System ¹	Supported Operating Systems: RPA/MDR series: 32- or 64-bit versions of Windows 7 MV one: 32- or 64 bit versions of Windows 7 ADT/AHT: 32- or 64-bit versions of Windows 7
Processor	Intel® Core™ 2 Duo (900 MHz)
Memory	1 GB RAM minimum
Hard Drive	20 GB minimum free on hard drive
CD-ROM or DVD	≥ 48X CD-ROM or DVD
LAN ports	Minimum of 2 ports/cards available (1 for instrument connection, 1 for database server)
Screen	VGA monitor

1. Install Microsoft Operating System Service Pack, Internet Explorer and/or Direct X (if required). If you don't have the required versions of these packages, they can be obtained through the Microsoft web site (at www.microsoft.com/downloads) or by using the Microsoft Windows Update mechanism (accessed through the Start menu or by accessing <http://update.microsoft.com>).

Other Hardware Considerations

- The computer should be a new computer that is not already attached to other analytical instruments.
- Before the TA Instruments Service Representative will schedule a visit to install new instruments, please obtain a hard copy of the Windows® system summary as instructed below to verify that your system is adequate. Please fax this verification sheet along with your company identification and phone number to TA Instruments Service at 302-427-4054.
- The computer must be connected to the Internet in order to register the software license.

Obtaining Hardcopy System Verification For Windows 7

- 1 Select **Programs > Accessories > System Tools > System Information** from the **Start** menu.
- 2 Verify **System Summary** is highlighted.



If you print out this summary from this step you will receive all system information (more than 50 pages). Follow the remaining steps to copy and print only summary information.

- 3 Select **Edit > Select All**, then select **Edit > Copy**.
- 4 Open Notepad or another word processing program.
- 5 Select **Edit > Paste** then **File > Print**.

Other Software Considerations

- You must have full administrator rights during software installation.
- TA Instruments is not responsible for resolving issues associated with connections to your corporate network. [See further information in the next section.]
- TA Instruments is not responsible for resolving hardware/software conflicts created by the addition of third party hardware or software to the computer.

System Configurations

The Rubber Testing Products communicate with the controller via TCP/IP. If you want to connect the instrument and controller to your in-house network, additional considerations will apply. Your MIS/IT department should configure the Ethernet card in the controller for communication with your in-house network.

Requirements for RTP Instruments

The following sections summarize laboratory requirements by instrument. Each section contains all of the requirements for that particular instrument. Therefore, some items will be redundant, if you have purchased a multi-instrument system.

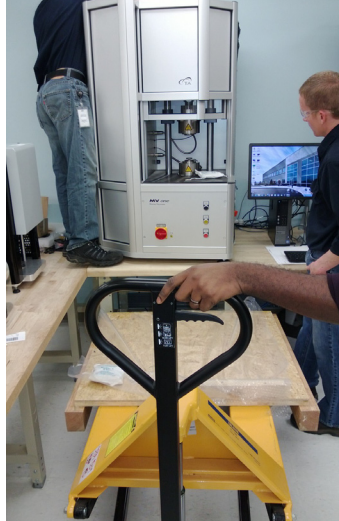
RPA elite, RPA flex, MDR one

Main Instrument Width Height Depth Weight	80 cm (31.5 in) 136 cm (53.5 in) 65 cm (25.5 in) 280 kg (620 lbs)
Power Requirements ¹	1 electrical socket 220VAC 50/60Hz available for the instrument, additional power supply for 1 PC and for 1 monitor Power supply for instrument provides minimum of 16 Amps and is protected against voltage fluctuations and electrical noise Separate, secure power supply for PC available
Laboratory Conditions ²	Temperature 5–40°C 80% Maximum Relative Humidity for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C. Instrument should be located in a dust-free, vibration-free environment, away from exposure to direct sunlight and direct air drafts. (Pollution Degree 2 Environment) Table: Permanent stability of least 300 kg; is rigid, vibration-free and at a right angle; is at least 140 cm wide and 93 cm deep If harmful vapors are expected during testing: A flexible exhaust hose diam. 100 mm is available (top cover) Maximum Altitude 2000 m (6560 ft) The following factors should be minimized, if possible: Vibrations from the lab bench Vibrations from the floor Air Flow directed from air-condition duct work Doors being opened and closed Room temperature variations Magnetic impulses Variations in main air supply pressure
Laboratory Requirements	Individual compressed air connection of at least 6.0 bar/90 psi available for each instrument; pressure is regulated to 4.5 bar/65 psi for input to the instrument. For <i>RPA elite</i> and <i>RPA flex</i> with variable platen sealing pressure option, 8.0 bar/120 psi is required to be able to access the full range of programmable pressures. Must be free of oil or any residual moisture. A 1/4 NPT female connection must be provided for the main air supply.

1. The image below shows the L6-20, 220 VAC plug provided for US customers. Customers should supply an L6-20 outlet.



2. The RPA *elite*, RPA *flex*, and MDR *one* are heavy instruments. A forklift must be used to lift and move the instrument. The instrument is too heavy to be moved by hand safely.



MV one

Main Instrument	
Width	80 cm (31.5 in)
Height	136 cm (53.5 in)
Depth	65 cm (25.5 in)
Weight	280 kg (620 lbs)
Power Requirements ¹	1 electrical socket 220 VAC 50/60Hz available for the instrument, additional power supply for 1 PC and for 1 monitor Power supply for instrument provides minimum of 16 Amps and is protected against voltage fluctuations and electrical noise Separate, secure power supply for PC available

Laboratory Conditions ²	<p>Temperature 5–40°C</p> <p>80% Maximum Relative Humidity for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C.</p> <p>Instrument should be located in a dust-free, vibration-free environment, away from exposure to direct sunlight and direct air drafts. (Pollution Degree 2 Environment)</p> <p>Table: Permanent stability of least 300 kg; is rigid, vibration-free and at a right angle; is at least 140 cm wide and 93 cm deep</p> <p>If harmful vapors are expected during testing: A flexible exhaust hose diam. 100 mm is available (top cover)</p> <p>Maximum Altitude 2000 m (6560 ft)</p> <p>The following factors should be minimized, if possible:</p> <ul style="list-style-type: none"> Vibrations from the lab bench Vibrations from the floor Air Flow directed from air-condition duct work Doors being opened and closed Room temperature variations Magnetic impulses Variations in main air supply pressure
Laboratory Requirements	<p>Individual compressed air connection of at least 6.0 bar/90 psi available for each instrument; pressure is regulated to 4.5 bar/65 psi for input to the instrument. Must be free of oil or any residual moisture.</p> <p>A 1/4 NPT female connection must be provided for the main air supply.</p>

1. The image below shows the L6-20, 220 VAC plug provided for US customers. Customers should supply an L6-20 outlet.



2. The MV *one* is a heavy instrument. A forklift must be used to lift and move the instrument. The instrument is too heavy to be moved by hand safely.



ADT, AHT

<p>Main Instrument</p> <p>Width Height Depth Weight</p>	<p>60 cm (24 in) 61 cm (24 in) 68 cm (27 in) 55 kg (121 lbs)</p>
<p>Power Requirements</p>	<p>1 electrical socket 220/110VAC 50/60Hz available for the instrument, additional power supply for 1 PC and for 1 monitor Power supply for instrument provides minimum of 3.15 Amps and is protected against voltage fluctuations and electrical noise Separate, secure power supply for PC available</p>
<p>Laboratory Conditions</p>	<p>Temperature 5–40°C 80% Maximum Relative Humidity for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C. Instrument should be located in a dust-free, vibration-free environment, away from exposure to direct sunlight and direct air drafts. (Pollution Degree 2 Environment) Table: Permanent stability of least 80 kg; is rigid, vibration-free and at a right angle; is at least 70 cm wide and 80 cm deep; allow 43 cm (17 in) on either side of the unit for loading the sample magazine Maximum Altitude 2000 m (6560 ft) The following factors should be minimized, if possible: Vibrations from the lab bench Vibrations from the floor Air Flow directed from air-condition duct work Doors being opened and closed Room temperature variations Magnetic impulses Variations in main air supply pressure</p>
<p>Laboratory Requirements</p>	<p>Individual compressed air connection of at least 6.0 bar/90 psi available for each instrument; pressure is regulated to 4.5 bar/65 psi for input to the instrument. Must be free of oil or any residual moisture. A 1/4 NPT female connection must be provided for the main air supply.</p>

Volumetric Sample Cutter

Main Instrument Width Height Depth Weight	40 cm (16 in) 68 cm (27 in) 43.5 cm (17 in) 55 kg (120 lbs)
Power Requirements	110/230VAC, 50/60Hz, 3.15 Amps
Laboratory Conditions	Temperature 5–40°C 80% Maximum Relative Humidity for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C. Instrument should be located in a dust-free, vibration-free environment, away from exposure to direct sunlight and direct air drafts. (Pollution Degree 2 Environment) Maximum Altitude 2000 m (6560 ft) The following factors should be minimized, if possible: Vibrations from the lab bench Vibrations from the floor Air Flow directed from air-condition duct work Doors being opened and closed Room temperature variations Magnetic impulses Variations in main air supply pressure
Laboratory Requirements	Pressure: 6.0 bar (optional booster up to 8 bars) A 1/4 NPT female connection must be provided for the main air supply.

TA Instruments Offices

For information on our latest products, contact information, and more, see our web site at:

<http://www.tainstruments.com>

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