Discovery SDT650

Site Preparation Guide

Revision A Issued March 2017

Table of Contents

Ideal Setup

IDEAL PLACEMENT AND BENCH MEASUREMENTS

Select a location with adequate floor space and a rigid laboratory bench that is level and is in a vibration-free environment. For optimal performance, it is recommended that the instrument be placed by itself on a separate marble table.

Bench length: 183 cm (72 in)

Table length: 60 cm (24 in)

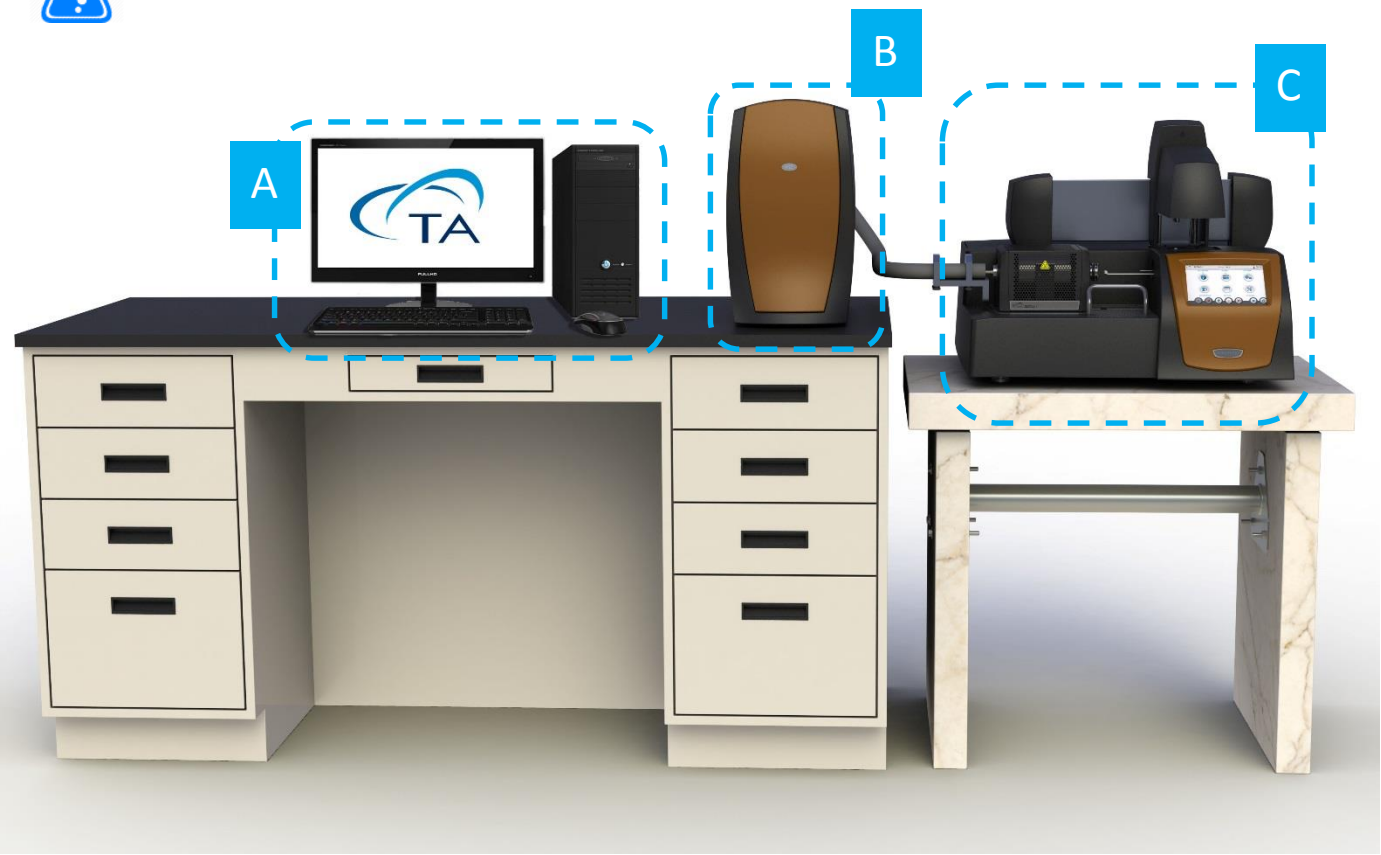
Bench depth: 76 cm (30 in)

Table depth: 76 cm (30 in)

Distance from the wall: 30.5 cm (12 in) min.

System Components

MAIN SYSTEM COMPONENTS



A. Computer (Controller)

B. Discovery Mass Spectrometer (Optional)

C. Instrument

Instrument Measurements

SDT650 *WITH* AUTOSAMPLER

- Height: 53 cm (21 in)
- Width: 66 cm (26 in)
- Depth: 64 cm (25 in)
- Weight: 40 kg (88 lbs)

SDT650 *WITHOUT* AUTOSAMPLER

- Height: 28 cm (11 in)
- Width: 66 cm (26 in)
- Depth: 64 cm (25 in)
- Weight: 33 kg (73 lbs)

Utility Requirements

POWER

- 100–240 VAC, 47–63 Hz, 1200 W
- Safety ground per local regulation

Power cords provided:

NEMA 5-15 plug

Use power cords with plugs appropriate for your circuit.

Supply voltages lower than indicated may result in a degradation of performance.

Ensure that the mains assigned do not also supply power to noise generating equipment nearby, such as motors, welders, transformers, etc.

An independent heavy GROUND wire must be provided through the power hookup. Improper grounding may cause severe damage for which the supplier will not accept responsibility. All power strips must be fully grounded and carry the ground through to the sockets into which the computer is plugged.

Utility Requirements

GAS

Purge Gases

- Acceptable purge gases: air, nitrogen, oxygen, argon, and helium
- Source gas pressure is a maximum 20 psig for all inlets at the back of the instrument
- Pressure regulator required

Conditions:

- Must be dry
- Must be free from oil, dirt, and water

If you are using samples that may emit harmful gases, attach a compatible tube to the purge gas exit to transfer the gas to an exhaust or other suitable protective device.

Flow Rate

Purge gas flow rate: up to 500 mL/min. Recommended flow rate is 100 mL/min

Computer Requirements

HARDWARE REQUIREMENTS

Description	Requirement
Processor	• Intel® Core™ 2 Duo or better • 2.93 GHz with 3 MB L2 cache
Memory	Required: ≥ 4 GB RAM Recommended: ≥ 8 GB RAM
Hard drive	≥ 80 GB free space • 700 MB required for Full version of TRIOS • 400 MB required for Lite version of TRIOS (without Online help)
DVD	≥ 48x CD-ROM or DVD
Screen resolution	Required: 1280 x 1024 with 24-bit colors Recommended: 1920 x 1080 with 24-bit colors
Graphic memory	128 MB
Screen (LCD) size	Required: 19” or greater Recommended: 24” wide screen

Computer Requirements

SOFTWARE REQUIREMENTS

Item	Requirement
Operating System	• Windows 7, 8, 10 Ultimate, Enterprise & Professional • Home version not supported
	Required: 32-bit or 64-bit version Recommended: 64-bit version
Internet	**Internet connection is strongly recommended for ongoing support after installation**
Browser	Internet Explorer
Other	Microsoft Operating System Service Pack
Other	Must be up-to-date
Network	*A second network card for corporate network connection is recommended.* *TA Instruments is not responsible for resolving issues associated with connections to your corporate network.*
Conflicts	*TA Instruments is not responsible for resolving hardware/software conflicts created by the addition of third party hardware or software to the computer.*

Accessories

DISCOVERY MASS SPECTROMETER MEASUREMENTS

Height: 41 cm (16 in)

Width: 26 cm (10 in)

Depth: 61.5cm (24 in)

Weight: 28 kg (62 lbs)

DISCOVERY MASS SPECTROMETER REQUIREMENTS

Requirements	
	• Power adapter: 240 VAC/2 A; 100 VAC/5 A; 50/60 Hz • Pump inlet: 24 VDC, 2.5 A • Backing pump: 24 VDC, 3.15 AT • Turbo pump: 5.0 AT • Heaters: 8.0 AT • Mains inlet: 6.3 AT • All fuses: 250 VAC 5x20 mm Ceramic Fast Acting
if applicable	High Pressure Mass Spectrometer only: • Acceptable purge gases: nitrogen or argon • Must be dry and free of oil, dirt, and water • Purge gas pressure: 7–14 kPa gauge (1–2 psig)

Circulator Power Cooling Gas LN_2 Fluid Light Hardware Software Temp Lab Customer

Site Preparation Checklist

Discovery SDT650

	Sufficient bench space for instrument, computer, and Mass Spectrometer (if needed) ☐ Length: 183 cm (72 in) ☐ Depth: 76 cm (30 in)
	☐ Instrument power is 100–240 VAC, 47–63 Hz, 1200 W
	Purge gas: ☐ Is one of the following: air, nitrogen, oxygen, argon, or helium ☐ Is dry and free of oil, dirt, and water ☐ Pressure regulator is present ☐ Maximum 20 psig inlet pressure ☐ Gas source regulated pressure: up to 500 mL/min High Pressure Mass Spectrometer Purge Gas (if applicable): ☐ Is nitrogen or argon ☐ Pressure is 7–14 kPa gauge (1–2 psig) ☐ Is dry and free of oil, dirt, and water

I hereby acknowledge that all utility requirements have been met per the checklist above and that they will be ready at the agreed time of installation.

<u>If all utility requirements are not met at the agreed time of installation, additional charges may be incurred for a return Service trip.</u>

_____ / ____ / ____

Customer *DD* *MM* *YYYY*

_____ _____ _____ _____

Company *City* *State* *Country*

Please send a signed copy of the completed checklist to your local Service representative.

TA Instruments Offices

For information on our latest products, contact information, and more, see our website at: http://www.tainstruments.com.

To find your local TA Instruments office and contact information, visit http://www.tainstruments.com/contact/ta-directory/

TA Instruments – Waters LLC
Corporate Headquarters
159 Lukens Drive
New Castle, DE 19720
USA

Telephone: 302-427-4000
Fax: 302-427-4001
Email: info@tainstruments.com