

Discovery TGA55, TGA550, TGA5500



Site Preparation Guide

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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)

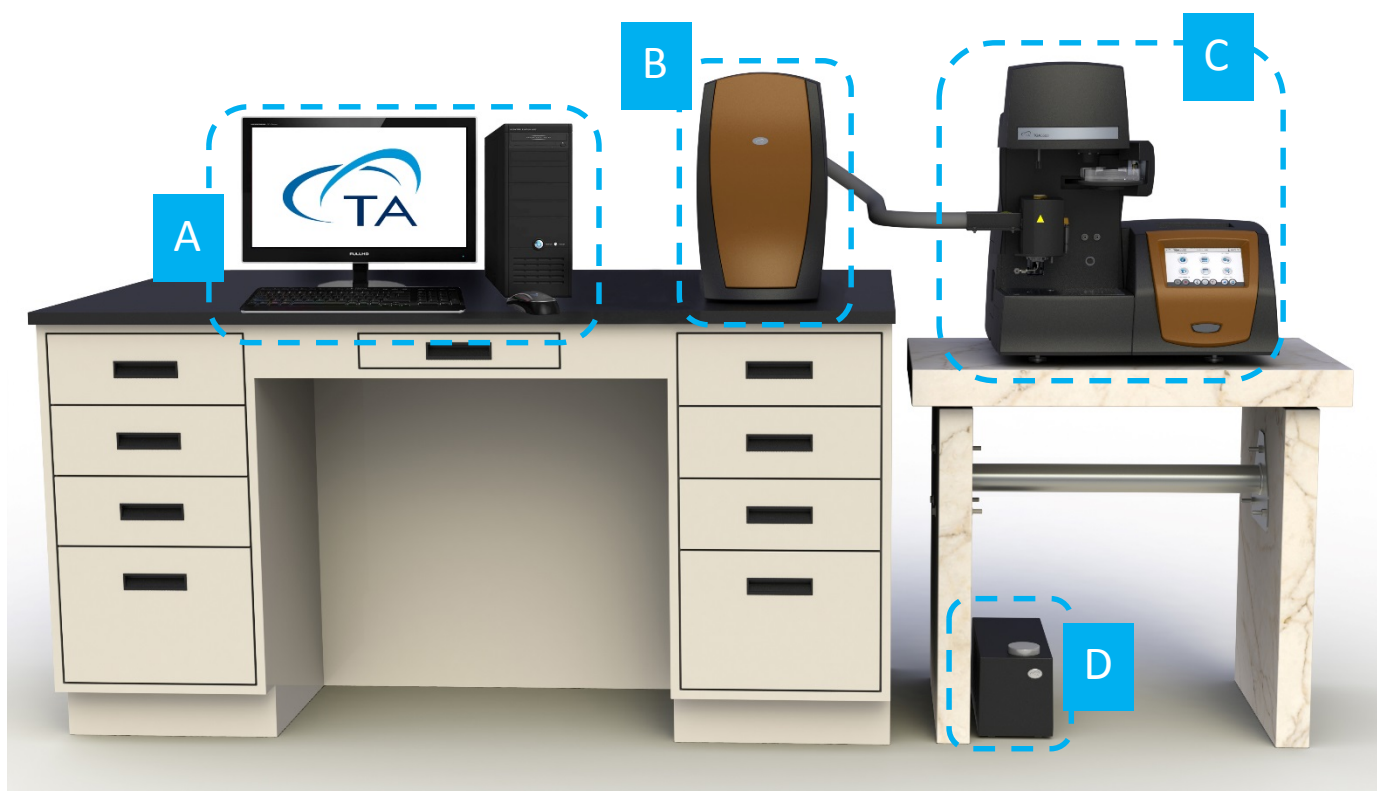
Table depth: 76 cm (30 in)

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

System Components



MAIN SYSTEM COMPONENTS

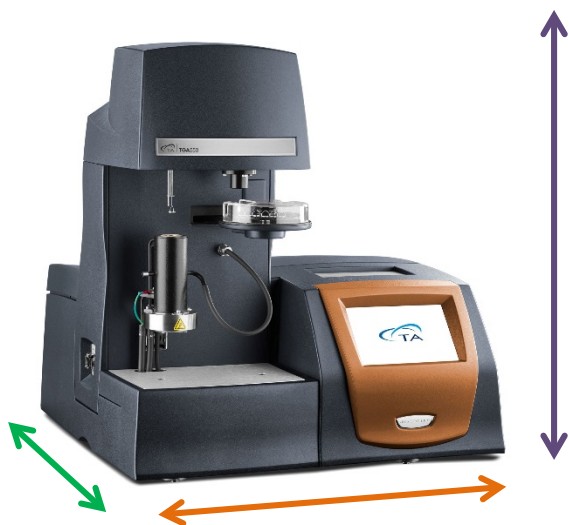


- A. Computer (Controller)
- B. Discovery Mass Spectrometer (Optional)
- C. Instrument
- D. Heat Exchanger

Instrument Measurements



MAIN INSTRUMENT



Height: 61 cm (24 in)

Width: 56 cm (22 in)

Depth: 56 cm (24 in)

Weight: 34 kg (76 lbs)

Utility Requirements




POWER

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



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
- Use dry nitrogen as the base purge gas when using a cooler

Flow Rates

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

Furnace Type	Flow Rate for Sample	Flow Rate for Balance
Wire-wound furnace	60 mL/min	40 mL/min
EGA furnace	90 mL/min	10 mL/min
IR furnace	25 mL/min	10 mL/min

Wire-wound furnace



EGA furnace



IR furnace

Computer Requirements



HARDWARE REQUIREMENTS

Description	Requirement
Processor	<ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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	<ul style="list-style-type: none">Windows 7, 8, 10 Ultimate, Enterprise & ProfessionalHome version not supported
	Required: 32-bit or 64-bit version Recommended: 64-bit version
Browser	Internet Explorer
Other	Microsoft Operating System Service Pack
Other	Must be up-to-date
Network	<i>TA Instruments is not responsible for resolving issues associated with connections to your corporate network.</i>
Conflicts	<i>TA Instruments is not responsible for resolving hardware/software conflicts created by the addition of third party hardware or software to the computer.</i>

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



LN₂



Fluid



Light



Hardware



Software



Temp



Lab






Customer

Site Preparation Checklist



Discovery TGA55, TGA550, TGA5500

	Sufficient bench space for instrument, computer, and Mass Spectrometer (if needed) <input type="checkbox"/> Length: 183 cm (72 in) <input type="checkbox"/> Depth: 76 cm (30 in)
	<input type="checkbox"/> Instrument power is 100–240 VAC, 47–63 Hz, 1200 W
	<p>Purge gas:</p> <ul style="list-style-type: none"><input type="checkbox"/> Is one of the following: air, nitrogen, oxygen, argon, or helium<input type="checkbox"/> Is dry and free of oil, dirt, and water<input type="checkbox"/> Pressure regulator is present<input type="checkbox"/> Maximum 20 psig inlet pressure<input type="checkbox"/> Gas source regulated pressure: up to 500 mL/min <p>High Pressure Mass Spectrometer Purge Gas (if applicable):</p> <ul style="list-style-type: none"><input type="checkbox"/> Is nitrogen or argon<input type="checkbox"/> Pressure is 7–14 kPa gauge (1–2 psig)<input type="checkbox"/> 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.

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

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>.

For TGA training videos, visit <http://www.tainstruments.com/videos/>

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