# RS-DSC



Site Preparation Guide



## **Ideal Setup**

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Circulator Power Cooling

Gas

 $LN_2$ 

Fluid

Light Hardware Software Temp

Lab Customer



## Ideal Setup



### **RS-DSC: 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.



Bench width: 2.4 m (8 ft)

Bench depth: 76 cm (30 in) min.

Distance from the wall: 20 cm (8 in) min.



Allow 38 cm (15 in) floor space and 20 cm (8 in) clearance at the rear of the water circulator for air circulation.



# **System Components**



- A. Computer (Controller)
- **B.** Instrument
- C. External Water Circulator/Controller



## Instrument Measurements



**RS-DSC** 

Height LID OPEN: 65 cm (25.5 in)

Height LID CLOSED: 35.5 cm (14 in)



Width: 84 cm (33 in)

Depth: 66 cm (26 in)

Weight: 54.4 kg (120 lbs)



# **Utility Requirements**



#### **LABORATORY**

Item	Requirement
Temperature	15–30°C
Relative Humidity	5–80% (non-condensing)
Temperature Stability	±1°C with changes in temperature being gradual shifts instead of fast changes
Instrument Location Environment	<ul> <li>Dust-free</li> <li>Vibration-free</li> <li>Away from exposure to direct sunlight and direct air drafts</li> <li>Pollution Degree 2 Environment</li> <li>Maximum altitude: 2000 m (6560 ft)</li> </ul>



#### **POWER**

Item	Requirement
Instrument	100–240 VAC, 3.15A, 50/60 Hz
Power line	Grounded, single-phase line for instrument and computer, not shared with motors, heaters, or compressors  • 15 A for voltages near 120 VAC  • 10 A for voltages near 230 VAC
Electrical power cord	<ul> <li>The plug of the cord must be rated to carry at least 125% of the product's current rating.</li> <li>The cord length must be less than 4.5 meters and must be UL or CSA approved.</li> </ul>
Customer-supplied	Surge suppressor power strip
<b>WATE</b>	Surge suppressor power strip



#### **WATER**

Instrument	Requirement
RS-DSC	Requires an external water circulator
TA water bath	If using a water bath from TA Instruments: 7 L (1.85 gal) distilled water



## **Computer Requirements**



#### **HARDWARE REQUIREMENTS**

Item	Requirement
Processor	Intel® Core™ 2 Duo (2.93 GHz, 3 MB L2 cache) or better
Memory	Minimum: ≥ 16 GB RAM Recommended: ≥ 32 GB RAM
Hard drive	Minimum: ≥ 500 GB free space
CD-ROM or DVD (Optional)	DVD-ROM drive recommended if internet access is unavailable
Screen resolution	Minimum: 1024 x 768 with ≥ 24-bit colors
Graphic memory	128 MB
USB Port	Required: One available USB port (2.0 compliant)



### **SOFTWARE REQUIREMENTS**

Item	Requirement
Operating System	<ul> <li>Windows 10 or 11</li> <li>Home version not supported</li> <li>64-bit version required</li> </ul>
Browser	Internet Explorer
Service Pack	Microsoft Operating System Service Pack
Updates	Windows Operating System and associated Microsoft updates must be up to date
Network	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



#### WATER CIRCULATOR



Height: 61.7 cm (24.3 in)

Width: 22.1 cm (8.7 in)

Depth: 54.1 cm (21.3 in)

Weight: 40.8 kg (90 lbs)

#### Requirements



Must be placed 20 cm (8 in) from the rear wall.



If purchased from TA, 7L (2 gal) distilled water is required for installation.

























Circulator

Power

Cooling

Gas

 $LN_2$ 

Fluid

Light

Hardware

Software

Temp

Lab

Customer



# RS-DSC Site Preparation Checklist



### RS-DSC

	Sufficient bench space for instrument, computer, sample prep space and tools:  Depth: 76 cm (30 in) minimum Distance from the wall: 20 cm (8 in) minimum		
	Laboratory conditions meet the following requirements:  □ Dust-free, vibration-free, away from exposure to direct sunlight/air drafts, in a pollution degree 2 environment  □ Maximum altitude is 2000 m (6560 ft)  □ Relative humidity is 5–80% non-condensing  □ Temperature is 15–30°C with a stability of ±1°C		
*	☐ RS-DSC: 100–240 VAC, 4A, 50/60 Hz ☐ Water Circulator: 120 VAC, 60 Hz, 13A or 240 VAC, 50 Hz, 13A		
393	☐ External water circulator ☐ If purchased from TA Instruments, 7L (2 gal) distilled water required for installation		
1	<ul> <li>□ The Customer must be available to assist the TA Service Representative with lifting the instrument during installation.</li> <li>□ The Customer assumes responsibility for any damage that occurs when the instrument is moved by someone other than a trained TA Instruments Service Representative.</li> </ul>		
	<ul> <li>□ Computer meets all hardware requirements</li> <li>□ Computer meets all software requirements</li> <li>□ Customer's IT personnel has provided Administrative privileges on the controller computer</li> <li>□ The Customer's IT personnel will be on site the day of installation</li> </ul>		
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 Service trip	requirements are not met at the agreed time of installation, additional charges may be incurred for a return		
Court a man	DD MM YYYY		
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**

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To find your local TA Instruments office and contact information, visit <a href="http://www.tainstruments.com/contact/ta-directory/">http://www.tainstruments.com/contact/ta-directory/</a>

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