ODP868 & HM867 Dilatometers

Site Preparation Guide

Revision A Issued October 2022

Table of Contents

Ideal Setup

IDEAL PLACEMENT AND BENCH MEASUREMENTS

Select a location with adequate floor space for the instrument and a bench for the computer (controller) and any required accessories.

Table width: 4 m (13 ft)

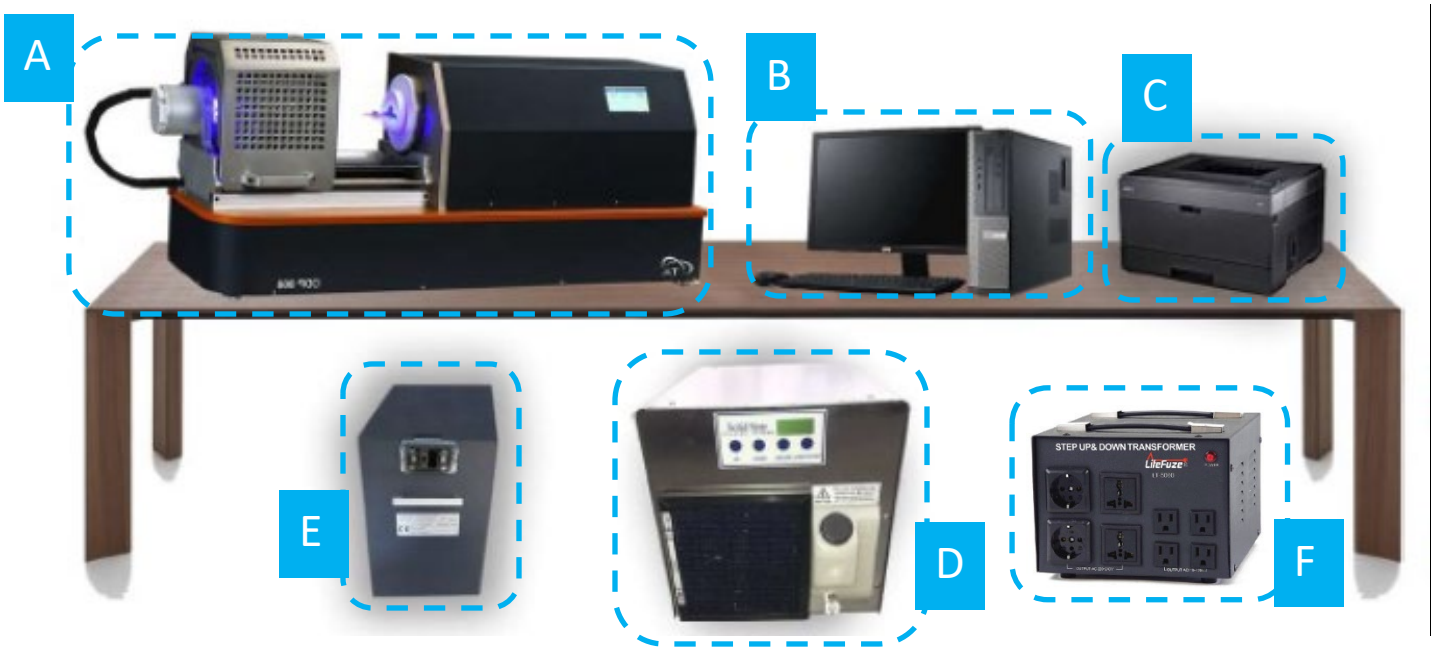
Table depth: 1 m (40 in)

Table height: 0.7 m (28 in)

Table minimum weight allowed: 122 kg (269 lb)

System Components

MAIN SYSTEM COMPONENTS



A. Instrument

B. Computer (Controller)

C. Printer (optional)

D. TCube Edge Circulator

E. Instrument Transformer

F. Power Supply Transformer (optional)

G. Gas canister (not shown)

Instrument Measurements

MAIN INSTRUMENT – ODP868 & HM867

Height: 49 cm (19 in)

Width: 117 cm (46 in)

Depth: 38 cm (15 in)

Weight: 85 kg (188 lbs)

MAIN INSTRUMENT – HM867 NON STANDARD

Height: 49 cm (19 in)

Width OPEN: 132 cm (52 in)

Width CLOSED: 112 cm (44 in)

Depth: 38 cm (15 in)

Weight: 90 kg (198 lbs)

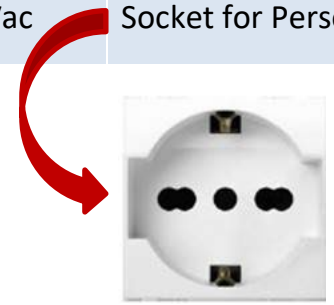
Utility Requirements

LABORATORY

Item	Requirement
Temperature	20°C ± 1°C
Relative Humidity	5–80% (non-condensing)
Instrument Location Environment	• Dust-free • Vibration-free • Away from exposure to direct sunlight and direct air drafts • Pollution Degree 2 Environment • Maximum altitude: 2000 m (6560 ft)

POWER (EUROPE and 230Vac WORLWIDE MARKET)

Item	Requirement
Instrument power	• 230V Single Phase, 50Hz/60Hz, 10A L, N • Universal Schuko socket (see image below), 2P+E 10/16A 230V
Personal Computer, Monitor, Printer, Chiller	• Personal Computer: 230 Vac, 5A • Monitor: 220 Vac, 1A • Printer: 230 Vac, 10A • 50Hz
Socket 230 Vac	Socket for Personal Computer , Monitor , Printer , Chiller.



Utility Requirements

POWER (US/ LATAM and 110Vac WORLWIDE MARKET)

Item	Requirement
Instrument power	• 230V single phase, 50Hz/60Hz, 10A L, N • Universal Schuko socket (see image below), 2P+E 10/16A 230V or Voltage transformer Litefuze if used.
Personal Computer, Monitor, Printer	• Personal Computer: 230 Vac, 5A (Strongly Recommended) • Monitor: 110 Vac, 1A • Printer: 110 Vac, 10A • 60Hz

Socket for Instrument supplied @ 230 Vac, single phase, 60 Hz	USA and Latin America socket 110 Vac
	 If Litefuze Transformer is used to supply Instrument and PC the sockets are integrated on the transformer.
	Monitor, Printer, Chiller can be connected to the 110 Volt plug. PC is strongly recommended to supply at 230 Volt with the same voltage of the instrument because they have a direct connection with LAN.

Utility Requirements

GAS

Item	Requirement
Conditions	• Must be dry • Must be free from oil, water, and dirt
Regulator	• Gas pressure valve reducer 2 bar
Flowmeter	• Masterflex Variable-Area Flowmeter with Valve, acrylic housing • 0.1 to 1.0 L/min
Input	• 0.3 L/min maximum

Computer Requirements

HARDWARE REQUIREMENTS

Item	Requirement
Processor	• Intel® Core™ i5 or better
Memory	≥ 8 GB RAM
Hard drive	≥ 1 TB free space
Ethernet	• Nr. 2 Ethernet connections: ○ Second Ethernet can be Pci Express Nic Board ○ USB to Ethernet connection ○ USB c to Ethernet connection
Video Resolution	• 1920 x 1080 pixels

Computer Requirements

SOFTWARE REQUIREMENTS

Item	Requirement
Operating System	• Windows 10 Pro & Enterprise • Home version not supported • English language
Internet	Recommended: internet connection to the PC that is connected to the instrument for remote assistance
Windows Updates	Turn off Windows power-saving settings  **Updates must be controlled**. Refer to the document "Controlling Windows Updates" on the TA Instruments website.
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.*  **Antivirus not correctly set can conflict with the instrument communication – there is high risk for damage to the instrument**.

Accessory Requirements

TCUBE EDGE CIRCULATOR MODEL 5A MEASUREMENTS

Requirements	
	• 100–240 VAC at 50/60 Hz (3.5 A) • Neutral to ground < 1 volt • 8.5 A at 100 VAC, 3.5 A at 240 VAC • Digital PID controller for heating and cooling
	• Koolance (supplied with TCube) • Maximum 30 L/hr • Pressure 1 bar
	30L/min @ 20°C

Height: 28 cm (11 in)

Width: 33 cm (13 in)

Depth: 28 cm (11 in)

Weight: 11.3 kg (25 lbs)

Accessory Requirements

TRANSFORMER REQUIREMENTS

Requirements

USA and Latin America only:

- Supply voltage sock connection check at 110Vac

110Vac – 230Vac Instrument supply transformer:

- Machine must be supplied at 230Vac single phase 50/60 Hz
- Litefuze™ LT-5000 Voltage transformer has been tested and is suitable for both the ODP868 and HM867
- Strongly recommended to supply PC at 230Vac 50/50Hz.

WARNING: DO NOT USE 220V double phase, as it will damage the instrument

Height: 22 cm (8,75 in)

Width: 17 cm (6,75 in)

Depth: 30 cm (12 in)

Weight: 13.1kg (29 lbs)

Site Preparation Checklist

ODP868 & HM867

	Sufficient floor space and bench space: ☐ Table space (w x d x h) 4 m (13 ft) x 1 m (40 in) x 0.7 m (28 in) ☐ Table must be able to carry a minimum of 122 kg (269 lbs)
	Laboratory conditions meet the following requirements: ☐ Dust-free, vibration-free, away from exposure to direct sunlight/air drafts, in a pollution degree 2 environment ☐ Temperature is 20°C ± 1°C ☐ Relative humidity of 5–80% non-condensing ☐ Maximum altitude is 2000 m (6560 ft)
	☐ Power is 230V single phase, 50/60 Hz, 10A L, N, Earth Ground necessary. ☐ For a supply voltage of 110V, 60Hz a voltage converter transformer is required
	☐ Gas input 0.3 L/min maximum ☐ Flow rate 0.1 to 1.0 L/min ☐ Regulator 2 bar
	☐ Computer meets all hardware requirements ☐ Computer meets all software requirements
	☐ The Customer assumes responsibility for any damage that occurs when the instrument is moved by someone other than a trained TA Instruments Service Representative.

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.

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