

*What does a company that makes the most popular Table Top Microscope do next?.....we make it better!!*



## Hitachi Tabletop Microscope

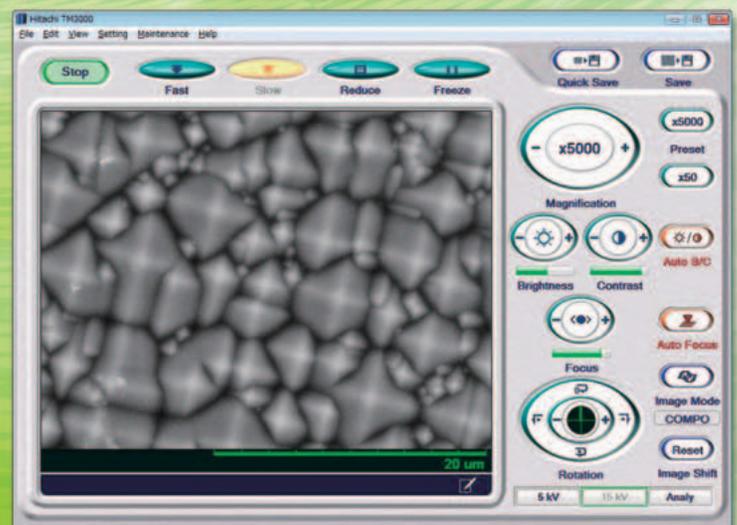
# TM3000

- the next generation in fully automated Table Top Microscope



- Smaller, compact and lightweight design
- Higher resolution, higher magnification
- Easier to operate - One button auto start
- Larger stage, larger samples
- Motorization package\*
- Variable accelerating voltage (enhanced sample surface observation)
- Beam current control
- Plugs into standard outlet, no other facilities required
- User friendly GUI on Windows® 7

\*Option



TM3000 operation monitor

## Specifications

Items	Description
Magnification	15 to 30,000× (digital zoom: 2×, 4×)
Observation condition	5kV/15kV/Analysis
Observation mode	Standard mode Charge-up reduction mode
Image mode	COMPO/Shadow 1/Shadow 2/TOPO
Sample stage traverse	X: ±17.5mm, Y: ±17.5mm
Maximum sample size	70mm in diameter
Maximum sample height	50mm
Electron gun	Pre-centered cartridge filament
Signal detection system	High-sensitive semiconductor BSE detector
Auto image adjustment function	Auto start, Auto focus, Auto brightness/contrast
Operation help functions	Raster rotation, Magnification preset (two steps) Image shift (±50μm@D*=4.5)
Frame memory	640 × 480 pixels, 1,280 × 960 pixels
Image data memory	HDD of PC and other removal media
Image format	BMP, TIFF, JPEG
Data display	Micron marker, micron value, date and time, image number and comments, Image mode, Observation condition, D* (Distance), Observation mode
Evacuation system (vacuum pump)	Turbomolecular pump: 30ℓ/s × 1 unit, Diaphragm pump: 1m <sup>3</sup> /h × 1 unit
Safety device	Over-current protection function, built-in ELCB

\*D (Distance) is defined as the distance between lower surface of a high-sensitive semiconductor BSE detector and sample surface.

## Dimensions and weight

Items	Description (Width × Depth × Height, Weight)
Main unit	330 × 606 × 565mm, 63.0kg
Diaphragm pump	145 × 256 × 217mm, 4.5kg

## Installation condition

Items	Description
Room temperature	15 to 30°C (Δt=±2.5°C/h or less)
Humidity	70%RH or less
Power source (TM3000)	Single-phase AC100 to 240V (Minimum: 90 [V], Maximum: 250 [V])
Grounding	100 ohm or less

\*Another power source for PC is required.

## Required PC specifications

Items	Description
OS	Windows® 7
CPU	Intel® Core™ 2 Duo P8700 or compatible CPU
Memory size	2GB or larger
Display monitor	15.4 type, WXGA 1,280 × 800 pixels
Interface connector	USB 2.0

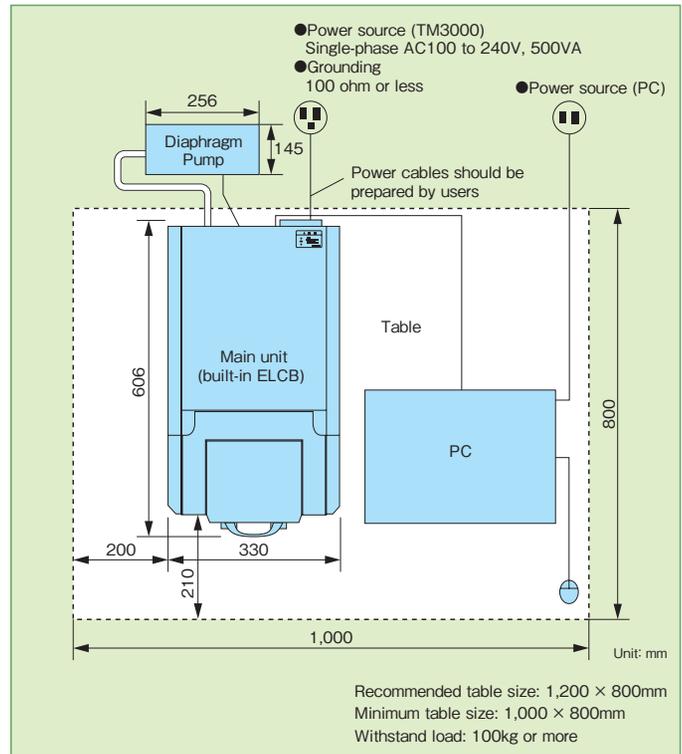
\*An associated PC to be procured locally.

\*Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries.

\*Intel is a registered trademark of Intel Corp. or its affiliated companies in the United States and/or other countries.

\*Specifications of a PC are subject to change.

## Minimum installation layout



\*A table with casters is not suitable to put a main unit of TM3000 on.

\*Recommended table size: 1,200 × 800mm, withstand load: 100kg or more.

\*Periodical maintenance is required for this apparatus.

\*Limited to indoor operation.

NOTICE: For proper operation, follow the instruction manual when using the instrument.

Specifications in this catalog are subject to change with or without notice, as Hitachi High-Technologies Corporation continues to develop the latest technologies and products for our customers.

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