

MF-830 Microforge



Powerful microscope mounted to produce microelectrodes for patch clamping.

In patch clamping, contact is made between the electrode and the cell membrane to measure cell potential, without damaging the cell membrane. This microforge assists the process by using fire-polishing technology to polish the microelectrode tips. A powerful microscope (525X total magnification) is included for making electrodes with tips less than $2\mu\text{m}$. Independent, easy-to-operate manipulators are provided for both heater and electrode. A fine movement unit on the side of the heater moves vertically to bring the heater closer to the tip even under high magnifications. The heater is made smaller so as not to get in the way and is turned ON/OFF with a foot switch. The electrode holder is in the form of a leaf spring, which is easy to detach/attach, and the narrower operating area facilitates ease of use.

Specification

Accessories included	Foot Switch MF-900F, Dedicated Electrode Holder, Spare Heater, Spare Lamp, AC Power Cord, Allen Wrench
Movement range	Heater manipulator: X14mm, Y14mm, Z14mm Heater manipulator vertical fine movement: 20mm Electrode manipulator: Y12mm, Z28mm Microscope focus movement range: 30mm
Magnifications	Eyepiece:15X, Objective lens:5X and 35X, Total magnifications:75X and 525X
Glass capillary	1mm - 1.5mm
Power Source	AC100 (± 5%), 50/60Hz, AC120 (± 5%), 50/60Hz AC220 (± 5%), 50/60Hz, AC240 (± 5%), 50/60Hz
Power consumption	Approx. 35W
Dimensions/Weight	W200 X D350 X H300mm, 6.5kg

Consumables

Model	Product	Description
PT-A	Platinum heater	100μm X 300mm
MF-900L3	Lamp	