NARISHIGE WEB NEWS

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Capabilities of the IM-31 Electric Microinjector

The IM-31 is an electric microinjector which was developed to be functional in both the applications of microinjection and electrophysiology. It is equipped with characteristic functions, and available at a more economical price than the IM-300.



In this issue, we will discuss the specifications of the IM-31, while comparing it with the former model (IM-30).

Functions	Former Model (IM-30)	IM-31
Pressure Readout	Not employed. Pressure adjusted by knob (only approximate).	Employed. Reproducibility enhanced by digital figure displayed on readout.
Injection Timer Setting	Adjusted by knob along guide calibration.	Injecting duration configurable from 10ms to 99.99s by 10ms.
Injection Count Setting	Not configurable	Configurable from 1 to 99 times.
Off-Timer Setting	Not configurable	Interval time for repeated action configurable from 10ms to 99.99s by 10ms.
Remote-Control Connecting Port	Not connectable	External control available through external signal input connector.
Adjustment Knobs		Operability enhanced by a refined knob.

For Electrophysiological Applications

For those researchers who perform electrophysiological studies, Off-Timer setting and Remote-Control Connecting Port permit periodic stimulation by delivering or puffing a drug to a cell.

For Microinjection Applications

For those researchers who perform microinjection studies, the IM-31 is a utility microinjector.

- DNA/RNA microinjection into C-elegans
- DNA/RNA microinjection and GFP (or other fluorescent agents) microinjection.

(Xenopus eggs, Zebrafish eggs, Killifish eggs, Drosophila eggs, Water Flea eggs, etc.)

*Suitable for research requiring high reproducibility and repetitive work.

For Those Researchers Who Seek More Functions

The IM-31 is equipped with only the INJECT function.

When you need HOLD, FILL, SEQUENCE (programming) and other functions, the IM-300 is recommended.

(Please refer back to Web News No. 20 & 21 for how to use the IM-300.)

[Bits of Knowledge]

The specification for the IM-31 electric injector indicates the maximum input pressure. Exceeding the maximum input pressure can cause the unit to malfunction. (Please do not input over 500kpa.)

Also, the product is designed to release an excess amount of pressure when input pressure exceeds output pressure. Setting input pressure close to output pressure permits more efficient pressure consumption.

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