



**Nano-volume Quantitative Dispenser** 

NANO MASTER™ SMP⁻II∕SMP⁻II

# **Nano-volume, Ultra-High-Precision Dispensing**

Additional power for nano-deposit / high-precision dispensing, filling of liquid medicines, solvents and volatile materials



High stability dispensing by digital control and measurement system.

Elimination of fluid drips issue by unique plunger mechanism and suck-back function.

Also compatible with micro-syringes, for high-precision dispensing of liquid material nano-deposits.

### Suitable products

LSI, IC, hybrid IC, transistors, diodes, color LCD, PCBs and other types of semiconductors, LCD substrates and electronic components. Products with precision mechanisms such as watches, cameras and optical equipment, as well as medical supplies and foodstuff.

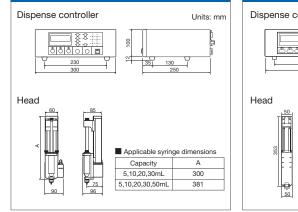
## **Applications**

Nano-deposit filling, micro-deposit dispensing, spot applications, line applications, adhesives, potting, etc.

Specifications			
Product name	Nano-volume Quantitative Dispenser NANO MASTER		
	SMP-III 30 mL Type	SMP-III 50 mL Type	SMP-II
Model	SMP-3-30	SMP-3-50	SMP-2
Dispenser Controller Model	SMP3-C		SMP2-C
Dispensing system	Volume measurement system		
Control system	Microcomputer digital control system		
Applicable liquid materials	Anaerobic adhesive, silicon resin, liquid medicine, UV adhesive, volatile liquid material, flux, ink		
Applicable syringe	0.05, 0.5, 1, 5 or 10 mL micro-syringe 5, 10, 20 or 30 mL syringe 5, 10, 20, 30 or 50 mL syringe		
Dispensing modes	TIMED mode, MANUAL mode, FINE mode/NORMAL mode		
Dispensing volume setting range	With 0.05 mL micro-syringe selected0.0001 to 500.000 µL   With 0.5 mL micro-syringe selected0.001 to 500.000 µL   With 1 mL micro-syringe selected0.01 to 5000.00 µL   With 5 mL micro-syringe selected0.01 to 5000.00 µL   With 5 mL micro-syringe selected0.01 to 5000.00 µL   With 5 mL micro-syringe selected0.01 to 5000.00 µL   With 10 mL micro-syringe selected0.00 to 5000.00 µL   With 5 mL syringe selected0.004 to 5000.000 µL   With 10 mL syringe selected0.004 to 5000.000 µL   With 20 mL syringe selected0.009 to 20000.000 µL   With 30 mL syringe selected0.009 to 30000.000 µL   With 50 mL syringe selected0.009 to 30000.000 µL		With 5 mL syringe selected0.1 to 5000.0 $\mu$ L With 10 mL syringe selected0.1 to 10000.0 $\mu$ L With 20 mL syringe selected0.1 to 20000.0 $\mu$ L With 30 mL syringe selected0.1 to 30000.0 $\mu$ L With 50 mL syringe selected0.1 to 48818.3 $\mu$ L
Main functions	Automatic low fluid alarm, suck back, Synchro Speed, dispensing shot counter, stop watch, unit display switch, Japanese-English display switch		
Channel number	400 CH		
RS-232C serial communication	Available		
Input signals	Dispense, channel switching, dispensing mode switching, channel preset, channel step, Synchro Speed ON		
Output signals	Dispensing completion/in-dispensing (selectable), busy, error, remaining volume alert, in-maintenance, in-limit, power on, replacement required, operating direction		
Rated voltage and frequency	AC100-240 V 50/60 Hz		
Power consumption	45 W		55 W
Conformity standards	CE marking machinery directive (low-voltage directive, EMC directive) EU RoHS		
Dispense head unit dimensions W*D*H	W90.5×D122.5×H300 mm	W90.5×D122.5×H381 mm	W50×D87×H352.5 mm
Weight of dispense head unit	2.3 kg	2.5 kg	1.8 kg
Dispense controller dimensions W*D*H	W300×D250×H111 mm		
Weight of dispense controller	4.5 kg		

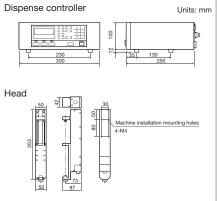
# **External Dimensions**





Safety precautions Please read the instruction manual carefully before use to ensure correct and safe usage.

ENGINEERING,INC.



SMP<sup>™</sup>-II

### Example of desktop robot installation



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