

NSP-7000 III


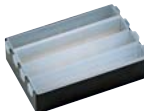
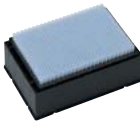



Dimension	1210mm (W) ×480mm (D) ×720mm (H) without PC
Dimension to Install	1450mm (W) ×560mm (D) ×770mm (H)
Weight	Approx.77kg (without PC)
Usable tips	NICHIRYO tips for robotic system HT series
Usable microplates	SBS standard 96 well or 384 well. (for deep-well plate or mini-tube plate, please contact us)
Nozzle head	220ul×12ch (standard option) Optional heads : 30ul×12ch, 30ul×24ch, 1000ul×12ch (The 24ch nozzle head is only for 384 well operation)
Sampling volume (warranty range) (Setting is available from 1ul)	220ul head : 10-220ul, 30ul head : 3-30ul, 1000ul head : 100-1000ul
Accuracy and CV	220ul head : <±2.8% AC, <2.8% CV at 10ul & <±0.8% AC, <0.8% CV at 220ul 30ul head : <±3.9% AC, <3.4% CV at 3ul & <±1.4% AC, <1.2% CV at 30ul 1000ul head : <±2.0% AC, <2.0% CV at 100ul & <±0.9% AC, <0.4% CV at 1000ul
Working stage	5 positions : Tip rack, Reservoir (30ml×4 trays) , Waste container, Microplate×2
Liquid surface sensing	Pressure sensor
Dispensing speed	1 microplate dispensing 100ul with 12ch head — approx. 60 sec
Outer door	Acrylic glass door with door switch for safety.
Stacker magazine's capacity	For microplate stacker : 20 microplates or 5 deep-well plates For tip rack stacker : 5 disposable tip racks
Power source	100-240V AC 50/60Hz 300VA (100V)
Operating software	Windows® 98/Me/XP/2000 (English version recommended)
PC spec	Higher than Pentium®, more than 64MB memory and 500MB harddisk, CD-ROM and floppy drive, RS232C D-sub 9 pin serial port.

※Personal computer (PC) is not included in NSP-7000 III system.

NSP-7000R

Dimension	300mm (W) ×645mm (D) ×585mm (H)
Dimension to Install	300mm (W) ×810mm (D) ×585mm (H)
Weight	Approx. 42kg
Usable tip	NICHIRYO HT-FSR & HT-FSR-B for robotic system (racked)
Usable microplate	SBS standard 96 well (for deep-well plate or mini-tube plate, please contact us)
Nozzle head	220ul×12ch
Sampling volume (warranty range) (Setting is available from 1ul)	10-220ul
Accuracy and CV	<±2.8% AC, <2.8% CV at 10ul <±0.8% AC, <0.8% CV at 220ul
Working stage	3 positions : Tip rack, Reservoir (30ml×4 trays) , Microplate
Liquid surface sensing	N/A
Dispensing speed	1 microplate dispensing 100ul with 12ch head — approx. 45 sec.
Microplate mixer	Built-in working stage
Power source	AC 100-120V or AC 200-240V 50/60Hz 150VA (100V)

HT series tips for robotic system and reservoir

			<div>7000 III</div> <div>7000 R</div>					<div>7000 III</div> <div>7000 R</div>	
	No.	Name	Volume	Contents		No.	Name	Contents	
	00-HT-FS	Bulk tip for robotic system	10-220ul	1000		00-NSP-RSV	4 tray reservoir	1	
	00-HT-FSR	Racked tip for robotic system		960					
00-HT-FSR-B	Racked tip for robotic system (sterilized)								
			<div>7000 III</div>					<div>7000 III</div> <div>7000 R</div>	
	No.	Name	Volume	Contents		No.	Name	Contents	
	00-HT-F30R	Racked tip for robotic system	3-30ul	3840		00-NSP-RSV-NF	Tray for reservoir	4	
	00-HT-F30R-B	Racked tip for robotic system (sterilized)							
			<div>7000 III</div>					<div>7000 III</div> <div>7000 R</div>	
	No.	Name	Volume	Contents		No.	Name	Contents	
	00-HT-KL	Bulk tip for robotic system	100-1000ul	1000		00-NSP-RSV80	Large volume reservoir (without frame)	50	
	00-HT-KLR	Racked tip for robotic system		960					
	00-HT-KLR-B	Racked tip for robotic system (sterilized)							

※Specification is subject to change without notice.
※Windows is the trademark of Microsoft company.
※Pentium is the trademark of Intel company.

http://www.nichiryo.co.jp

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Multi-Channel Liquid Handling Workstation

NSP-7000 III



Nichiryo Multi-Channel System

NSP 7000 SERIES



Multi-Channel Auto Sampling System

NSP-7000R

BE ORIGINATIVE
NICHIRYO

Configurable Operation

Automatic Pipetting, Diluting, Dispensing and Transferring

Completely New

New NICHIRYO liquid handling technology

Compact Design

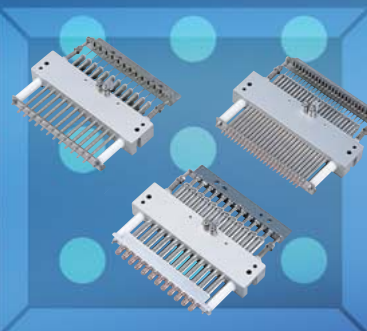
All-in-one system with 4 stackers for disposable tip and microplate



5 positions work stage



Multi channel operation



Interchangeable dispense head

NSP-7000 III is the third generation of Nichiryo Multi-channel liquid handling system. NSP-7000 III is more flexible than former NSP-7000 system and is capable of performing many kind of liquid handling purposes. This new generation has been installed many kind of new technologies for totally automated liquid handling procedure such as the newly designed stacker, automatic waste liquid pump-out system, Y axis drive unit for 384 well microplate access and flexible software.

- 5 positions sliding work stage accepts disposable tip rack, reagent reservoir, waste liquid container and labware such as SBS standard microplate, deep-well plate and tube plate.
- All labwares can be placed in both 8ch and 12ch way.
- The multi-channel nozzle head is interchangeable, 30ul×12ch, 30ul×24ch, 220ul×12ch, 1000ul×12ch. The standard option is 220ul×12ch and other heads are option.
- Compliant to 384 well microplate by 12ch nozzle head by newly developed Y axis drive. 24ch nozzle head is only for 384 well operation.
- Newly developed stacker is equipped as standard option for HTS operation. The maximum capacity of stacker's magazine is 5pcs of disposable tip rack and 20pcs of 96 or 384 well microplates.
- Liquid surface level sensing is installed.
- Automatic waste liquid pump-out system with small waste container will be installed as a standard option.
- Automatic reagent supply system to the reservoir is available as option.
- Up to 99 labwares can be registered and stored in memory.
- Windows based software is easy and flexible.

NSP-7000 III System

Sliding work stage, 220ul×12ch nozzle head, 4 stackers, Waste liquid pump-out, Y-drive and software

Automatic reagent supply system

Optional pump unit for automatic reagent supply from outside

Optional nozzle head

(220ul×12ch for disposable tip)
(30ul×12ch for disposable tip)
(30ul×24ch for disposable tip)
(1000ul×12ch for disposable tip)

Smooth operation

Come back as more silent system

Small foot-print design

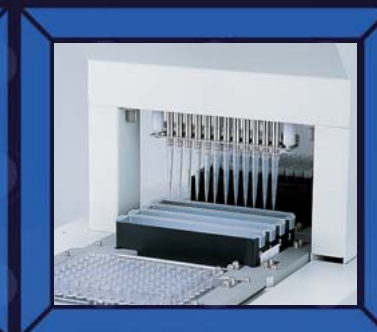
Compact design for desk top operation

Simple keypad operation

No PC assistance



Built-in keypad panel
Interactive programming



Multi channel operation
Both in 8ch & 12ch way



Microplate mixing stage



NSP-7000R is the compact liquid sampling system for desktop operation. NSP-7000R is more silent and smooth than the former model NSP-7000. This is an excellent system for microplate operation such as reagent dispensing, sample dispensing, serial dilution and on-plate transferring.

- New disposable tips are replaced automatically to ensure carryover free operation.
- High speed and safety operation with good accuracy and precision.
- 3 positions sliding work stage accepts disposable tip rack, reagent reservoir and microplate in 8ch or 12ch way.
- No PC, a built-in keypad panel is designed for easy programming and operation.

There are five variable dispensing modes.

- Mode 2 Reagent dispensing
A reagent can be transferred to a row of wells in a labware from a vessel for one time dispensing.
- Mode 3 Continuous dispensing of reagents and samples
A reagent can be transferred to multiple wells in a labware for sequential dispensing.
- Mode 4 Serial dilution
Perform serial dilution in any ratio. Perform serial dilutions either 8 wells across or 12 well across.
- Mode 5 Plate to plate transfer of samples
Transfer samples between source plate and assay plate. Perform replica plating.
- Mode 6 On-plate transfer (moving within the same plate)
Pick-up and dispense in a row one after another on the same labware at the mixing stage.

- Link files for complex liquid handling requirement by Mode 7. (maximum 100 files)
- Easy to call protocols to operate from memory.
- Wide volume range of 1-220ul in increments of 1ul.
- Excellent for examination of HIV and HCV by condensation method and ELIZA method.
- Microplate mixer installed as standard option.

NSP-7000R system

Sliding work stage, 220ul×12ch nozzle head, plate mixer