

AUTOMATIC DISPENSER

Compact size Dispensing workstation

NichiMart CUBE

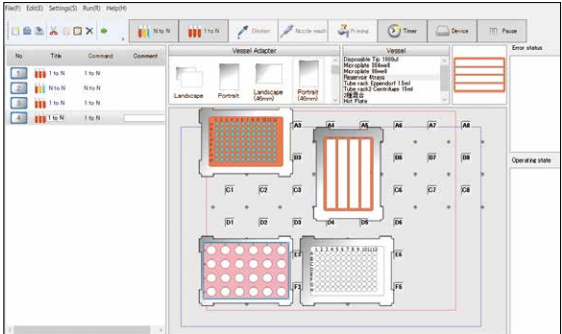
Compact size, ideal for automation of small applications.

- Replaceable dispensing nozzle sets can be used for various purposes.It is also possible to exchange to a multichannel nozzle unit as an option.
- Two types of dispensing methods, the disposable tip and the cleaning type nozzle unit are possible.
- NichiMasterCUBE, software for creating protocols and system adjustments, is included as standard accessories.
- With the multi-position deck linked with software, it is easy to create and modify protocols by intuitive operation.
- Error handling functions such as detections of liquid level and clogging are installed.
- I/O port for external devices connection is equipped.
- It corresponds to 384 well plate dispensing. Disposable tips to be used have compatibility with other Nichiryo products.
- Compatibility with Windows® 10/11(64-bit)



Feature 1 Protocols can be fully created and modified without restriction

The Nichimart CUBE with software for creating protocols. Protocols can be easily created and modified by combining vessel adaptors with multiple positions in the work deck. When the container is placed at the specified position on the work deck, it instantly determined the coordinates. In addition to various microplates, non-standard containers can be additionally registered.



*Needs to be connected with PC. No memory functions incorporated on the main body.

Feature 3 Replaceable nozzle sets

The Nichimart CUBE comes with a standard 200μL nozzle. It can be replaced by either 30μL, 1000μL or 1200μL nozzle unit. 8 channel nozzle unit and Cleaning nozzle unit are also available as an option.

Standard	• 200 μL nozzle unit
Option	• 30 μL nozzle unit • 1000 μL nozzle unit • 1200 μL nozzle unit • 8channel unit (220 μL) • Cleaning nozzle unit 1) Syringe type pump unit 2) Single cleaning probe 3) Wash bowl *3 Necessary items as a set available for using cleaning nozzle.



Feature 2 Detection of liquid level and liquid clogging

Liquid level and clogging can be detected by real time communication control with an error message.



Feature 4 Equipped with I/O port for external device connection

Standard built-in I/O port, on/off of external devices such as plate shaker, plate heater and vacuum pump, etc. can be controlled. By this feature, various applications can be automated. It also supports serial communication control RS-232C as an option.

Specifications

Cat. No	00-NMT-CUBE		
Standard accessories	Dispensing head: 200μl nozzle unit, Vessel adapter(6 pcs), NichiMart CUBE(control software), Eigenvalue data, Power cable, User's manual		
Dimension to Install	600mm(W)×590mm(D)×575mm(H) (without PC)		
Work deck dimension	350mm(X)×300mm(Y)×140mm(Z)		
Capacity	Max. 7 pcs (microplate) (depend on a dispense head)		
Nozzle Unit	Standard:200 μ L / Option:30 μ L,1000 μ L,1200 μ L,8channel ,Cleaning nozzle		
Nozzle Unit Volume range	30μL	3~30μL	Minimum Settable Volume: 1μL Maximum Settable Volume: Maximum dispensing volume of the nozzle head The cleaning nozzle volume range corresponds to the total range of the 4 syringe pumps (1, 2.5, 5, and 10 mL).
	200μL	20~220μL	
	1000μL	100~1000μL	
	1200μL	100~1200μL	
	8channel	20~220μL	
	Cleaning nozzle	100μL~10mL	
	2mL	200~2000μL	
Weight	Approx. 45kg (without PC)		
Power source	AC100~240V、50/60Hz、150VA (Power consumption varies by system configurations.)		
PC spec	Windows® 10/11 (64-bit)・USB port		

* PC with above specification required to create protocol and adjust system. *All company names, product names, and technology names mentioned are trademarks or registered trademarks of their respective owners.

Option

Cat. No	Name	Remarks	Cat. No	Name	Remarks
00-CUBE-001	Vessel for 1200μL tips	For Long clean tips	00-CUBE-010	Wash bowl	—
00-CUBE-002	Tip eject box	—	00-CUBE-012	30μL nozzle unit	Accuracy warranty coverage : 3-30μL
00-CUBE-003	Vessel adapter	Standard component	00-CUBE-013	200μL nozzle unit	Accuracy warranty coverage : 20-200μL
00-CUBE-004	16Φ Tube rack	Capacity : 24pcs	00-CUBE-014	1000μL nozzle unit	Accuracy warranty coverage : 100-1000μL
00-CUBE-005	13Φ Tube rack	Capacity : 24pcs	00-CUBE-015	1200μL nozzle unit	Accuracy warranty coverage : 100-1200μL
00-CUBE-006	15mL Centrifuge tube rack	Capacity : 24pcs	00-CUBE-016	8 channel nozzle unit (220μL)	Accuracy warranty coverage : 20-220μL
00-CUBE-007	50mL Centrifuge tube rack	Capacity : 6pcs	00-CUBE-017	Cleaning nozzle set	—
00-CUBE-008	Microtube rack	1.5mL, 24pcs	00-CUBE-023	Temperature control unit A	—
00-CUBE-009	Exclusive cart	Rollaway	00-CUBE-024	2mL nozzle set	—




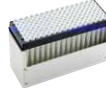

* Syringe pump unit (available in 1, 2.5, 5, 10, and 25 mL) Includes a single washing probe and a wash bowl.

Accuracy and Precision

Nozzle Unit	Volume(μ L)	AC(%)	CV(%)	Nozzle Unit	Volume(μ L)	AC(%)	CV(%)
200μL	20	±3.0	≤1.0	8channel (200 μ L)	20	±3.0	≤1.0
	200	±0.8	≤0.5		200	±0.8	≤0.5
1000μL	100	±3.0	≤1.0	Cleaning nozzle Unit	Full stroke	≤1.0	≤0.2
	1000	±0.8	≤0.5		200	±3.0	≤1.0
1200μL	120	±3.0	≤1.0	2mL	2000	±0.8	≤0.5
	1200	±0.8	≤0.5				

* Accuracy (es) and Precision (CV) values were measured using the compatible tips listed below.

Tip for robot systems

	Cat. No	Name	Volume(μL)	Contents	Nozzle Unit
	00-HT-F30R	Racked tip for robotic system	3~30μL	3840 (384×10racks)	30μL
	00-HT-F30RB	Racked tip for robotic system (sterilized)			
	00-HT-FS	Bulk tip for robotic system	10~220μL	1000	200 μL, 8channel
	00-HT-FSR	Racked tip for robotic system	10~220μL	960 (96×10racks)	
	00-HT-FSRB	Racked tip for robotic system (sterilized)			
	00-CT-MR	Clean tip M (filtered,sterilized)			
	00-HT-KL	Bulk tip for robotic system	100~1000μL	1000	1000μL
	00-HT-KLR	Racked tip for robotic system		960 (96×10racks)	
	00-HT-KLRB	Racked tip for robotic system (sterilized)			
	0N-CAP-100-010	Long clean tip (filtered,sterilized)	100~1200μL		1200μL
	00-LCT-LL	Long clean tip (Filtered, sterilized)	200~2000μL	480 (48×10racks)	2mL