Theta Low Profile Liquid Handling Robots: Options and Accessories:



By Repco Development Technologies





Theta Cube" **TC** Version

Part Number Scheme

TC-OEM - 02- LMDCL - 1P

Repco Development Technologies, LLC

TC-OEM - 02- LMDE - 1P

TC-OEM - 02- MDCL- 1P

TC-OEM - 02- MDE- 1P

OEM indicates oem version (no enclosure)

ENC indicates enclosed version

Number of Axis

02 indicates 2 axis.

03 indicates 3 axis

Motor Part Number

Input Power

Inputs/outputs

Command input

Controller Version

Field Bus communications

Feedback

Number of Plate locations

1P indicates # of well plates

Motor Option Lexium MDrive Closed Loop

LMDCM422

12 to 48 VDC Encoder

3 signal inputs 1 signal output Analog input 12 bit Yes, RS485, Ethernet

Ethernet/IP, Modus, CANopen

Profinet

Lexium MDrive Encoder LMDCP422

12-48 VDC Encoder 2 signal inputs

Analog input 12 bit

Pulse/Direction, speed control,

Velocity Mode; Variable speed control,

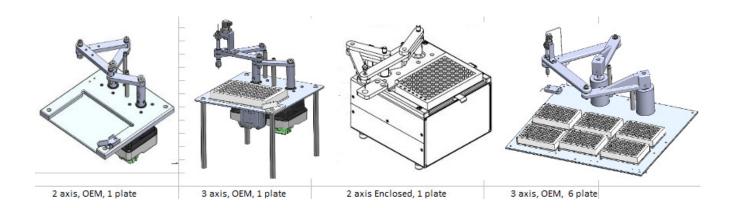
Variable torque mode

MDrive Closed loop MDrive Encoder MDI1PRL14 MDM1PSD

12-48 VDC 12-48 VDC Encoder Encoder 4 general purpose 2 universal input

expandable to 8 GP Analog input 10 bit Yes, RS485,

Modbus, CANopen Step Direction, CW/CCW



Single Station Theta

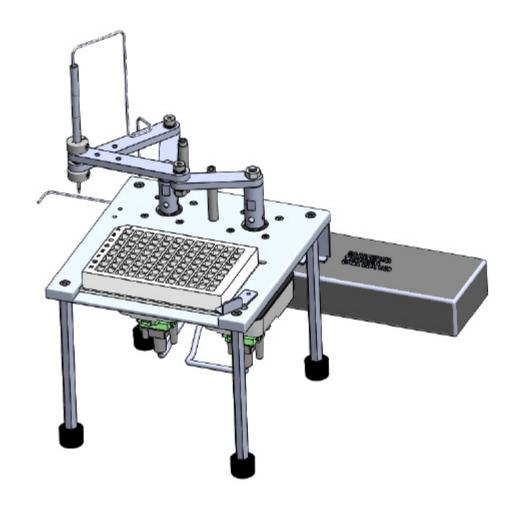


Features:

Low Profile liquid handling robot 24 Vdc

Control via Ethernet, Profinet, Modbus TCP, CANopen, Serial RS-422/485 with programmable memory.

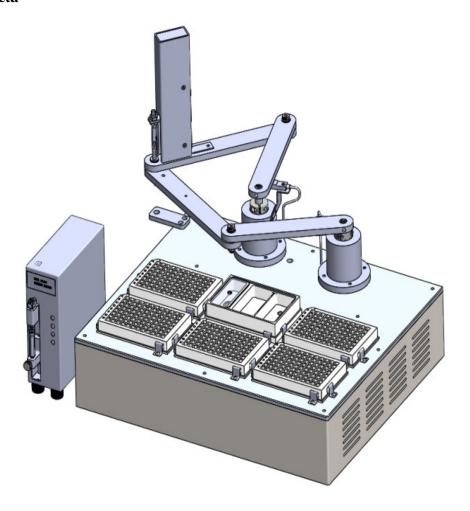
Single Station OEM



Single Station OEM (Drop in Deck) Theta shown with:

Nanoliter dispense probe. No Z Axis optional legs

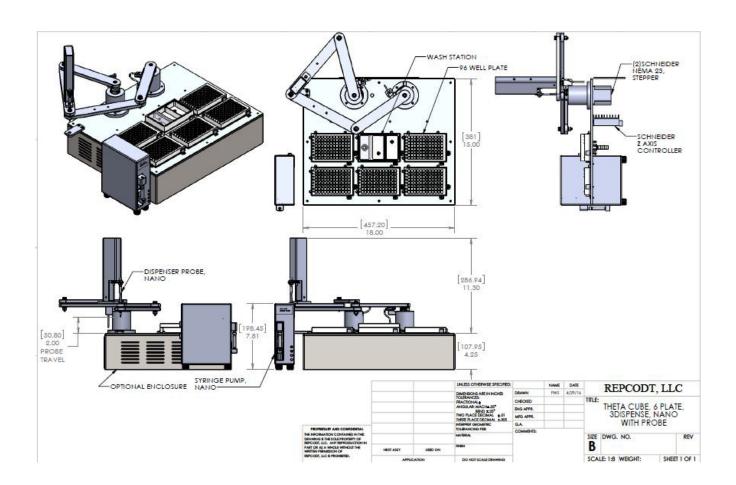
6 Position Theta



Shown with:

3Dispense Nanoliter dispense Module Nanoliter dispense probe 50 mm Z axis control Probe wash and drying station.

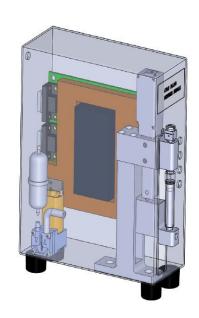
All dispense functions (slave) can be initiated via Lexium Mdrive Motion Control (master) via Ethernet, Profinet, Modbus TCP,CANopen, Serial RS-422/485 with programmable memory. Optional enclosure shown. Standard OEM version drops into instrument deck (Fluid tubing, wiring not shown)



Nano Liter Dispense Control Module - nLDM



Basic Version



Advanced Version

Features:

		<u>Basic</u>	<u>Advanced</u>
Dispense		From 10 nL to 1mL	From 10 nL to 1mL
Control	USB		USB (RS-232, 485)
Prime		User provided	Integrated
			Programmable Functions: *
			Prime
			Purge
			Aspirate
			Dispense

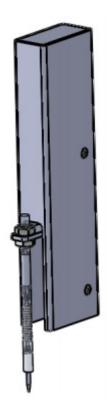
^{*}All functions can be initiated via comm port, I/O ports or manual actuation button on front panel Syringe Pump footprint

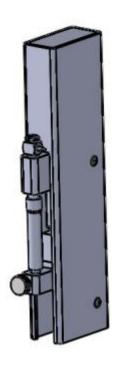
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Z axis with Dispense probe

Z axis with 3cm syringe

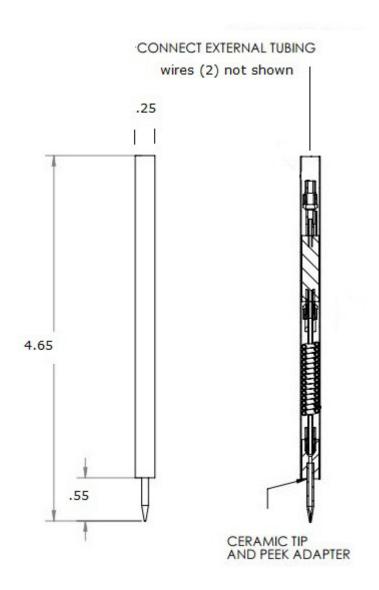




Features:

Nano liter dispensing 50 MM Z axis movement LVDT Position feedback Allows for use of 3cm syringes Syringe outlet up for bubble removal LVDT Position feedback

3Dispense Probe



Features:

For use with 3Dispense nLDM Enable droplet generation < 700pL Non damaging to live cell samples

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Theta Robot Accessories: - Parker Smart Syringe with Z axis

