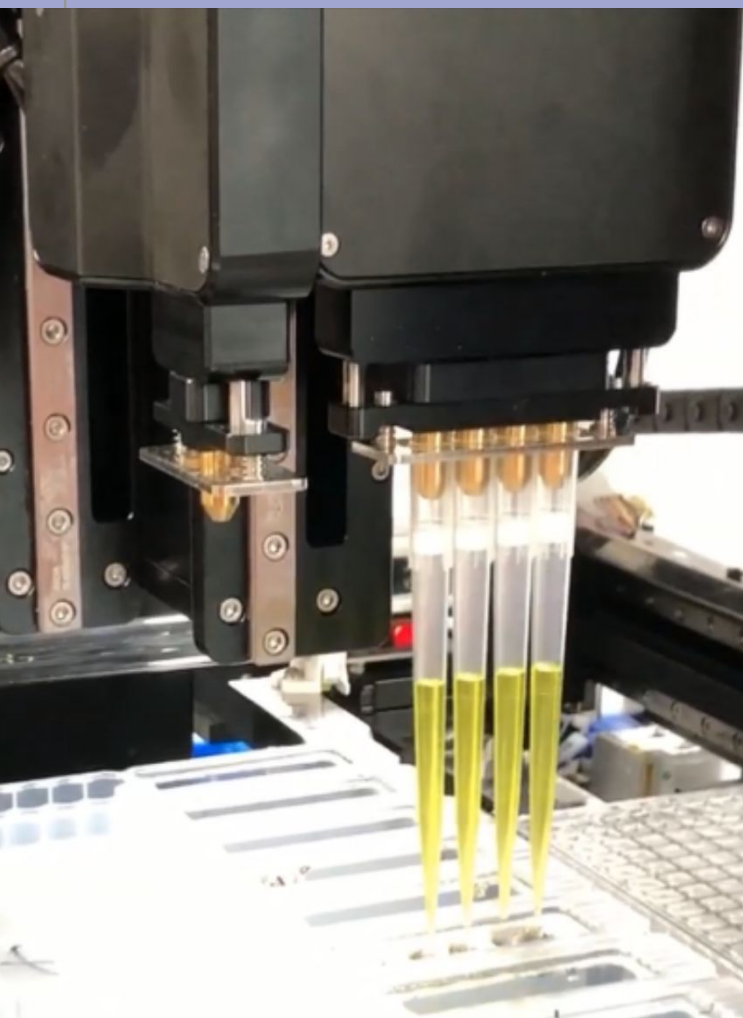




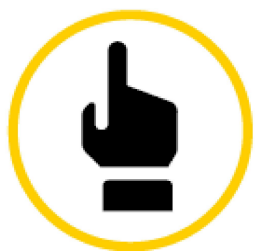
Celltrio is leading the world of lab automation through its modular integration of proven task modules, data management software, and robotics. We are redefining the standards for science and medicine.



## Robo-LH™ Liquid Handler

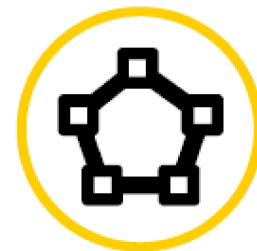
Celltrio's compact, automated Liquid Handler utilizes air displacement pipette technology to transfer small to medium-scale volumes of samples.

This cost-effective module is compatible with most commercial micro and serological pipette tips.



### Configurable

- Robo-LH configurations:
  - 1-Channel (1 pipette tip)
  - 4-Channel (4 pipette tips)
  - Multi-Channel (multiple pipette tips) with individual vertical actuation
- Fully automated pipetting includes attaching and removing pipette tips



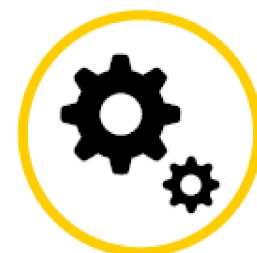
### Scalable

- The number of channels (pipette tips) is easily expandable to meet cell line needs
- Compatible with most common tips allowing easy integration to existing systems
- Integrated with a multi-tasking robot that can perform aspiration and dispensing across multiple labware types



### Data Management

- Powerful SkyView C3® software for advanced scheduling, data management, and liquid handler operation
- Data logs track user access, system performance, and sensors

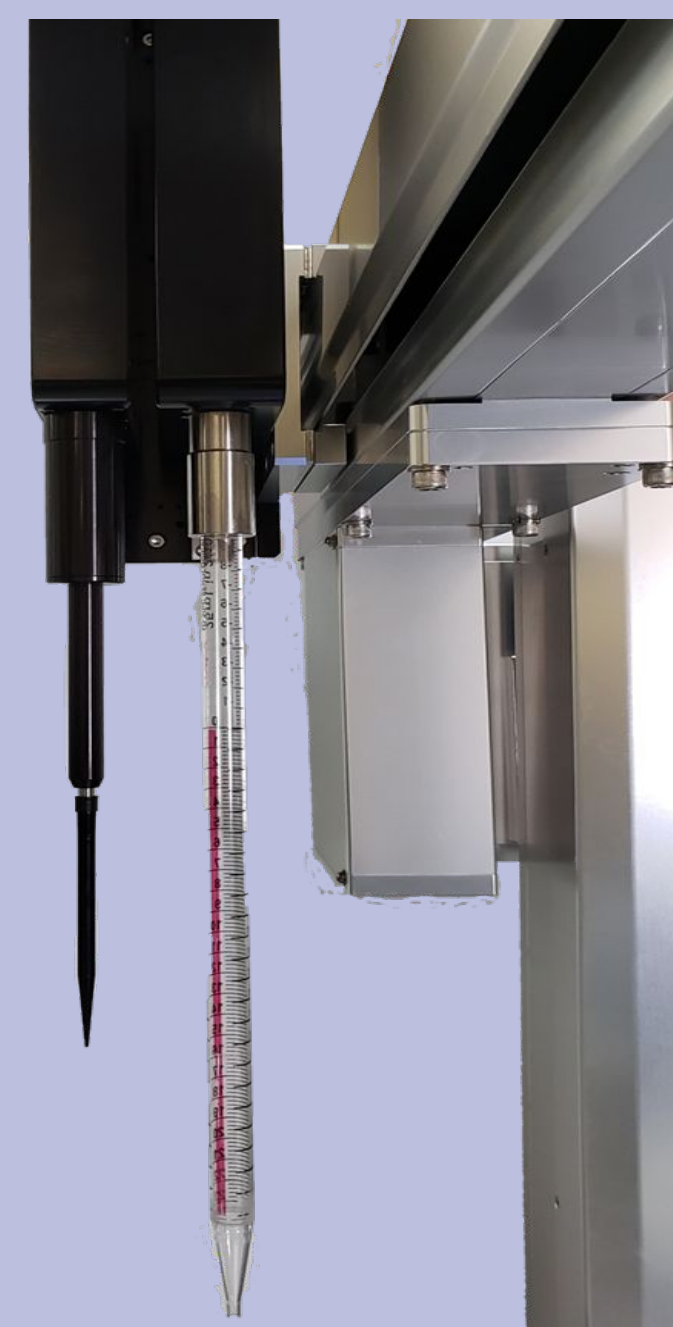


### Pipetting Performance

- Less than 3% coefficient of variation (CV) at 25°C and distilled water base
- Anti-drip pipetting technology
- Optional pressure and weight sensors for additional liquid control

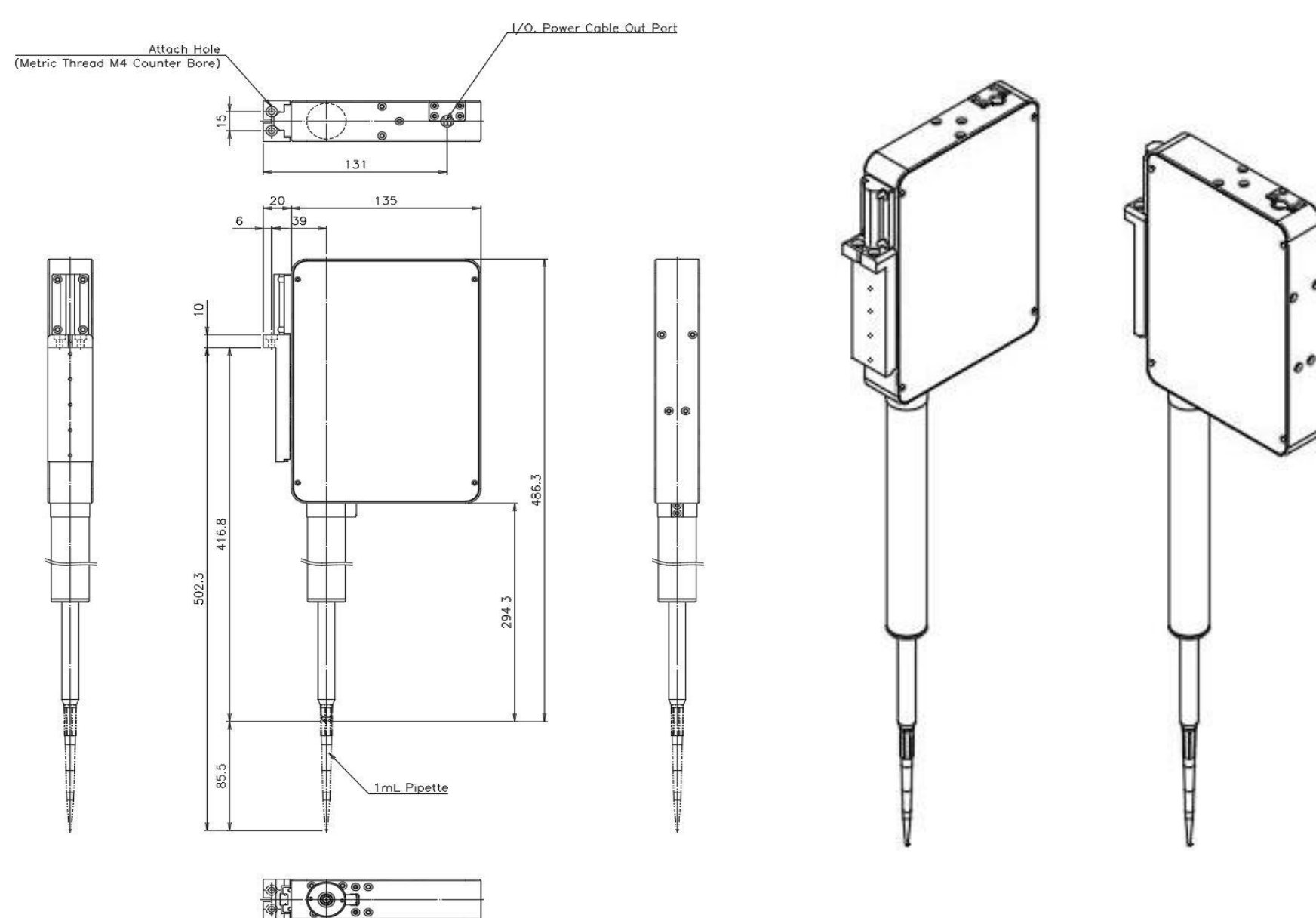
# Specifications

ADP Specifications					
Physical Specifications		ADP 1-Channel	ADP 1-Channel + Z-axis	ADP 4-Channel	ADP 4-Channel + Z-axis
Dimensions (W x D x H)	[mm]	30 x 103 x 224.3	38 x 205.5 x 404.83	115 x 61.2 x 220.7	260.2 x 84.15 x 292
Weight	[kg]	0.62	1.7	1.22	2.85
Performance		50mL	25mL	10mL	1000µL
Pipetting Volume Resolution	[µL/pulse]	0.130	0.065	0.052	0.004
Min. Pipetting Volume*	[mL]	10	5	1	0.02
Pipetting Method		Air Displacement Pipetting with Precision Syringe			
Driving Method	System	Precision Ball Screw Speed of use: 50 mm / sec CV value: 10 (± 10%)			
	Motor	Stepper Motor (Micro-step Control)			
	Z-axis	300 mm Stroke Z Axis with Stepping Motor Syringe drive stroke is 60 mm (50 mm is process, remaining 10 mm is for tip separation)			
Pipette Tip Eject		Automatic			
Liquid Level Detection		Optional (External Detection Module with Vision System)			
Automatic Drip Prevention		Motor Controlled Drip Prevention			
Environment		Temperature Range: 18°C ~ 32°C / Relative Humidity: 40% ~ 80% (non-condensing) / Indoor Use Only			
Operating Condition		Power Requirement: 24VDC, 3A   Communication: RS-232C   Programmable Recipe			
Pipetting Performance	CV [%]	Less than 3% * Precision based on calibration to viscosity of liquid sample			



1-Channel 1 mL  
Micropipette Tip  
1-Channel 25mL  
Serological Pipette Tip

# Dimensions



4-Channel



1-Channel

