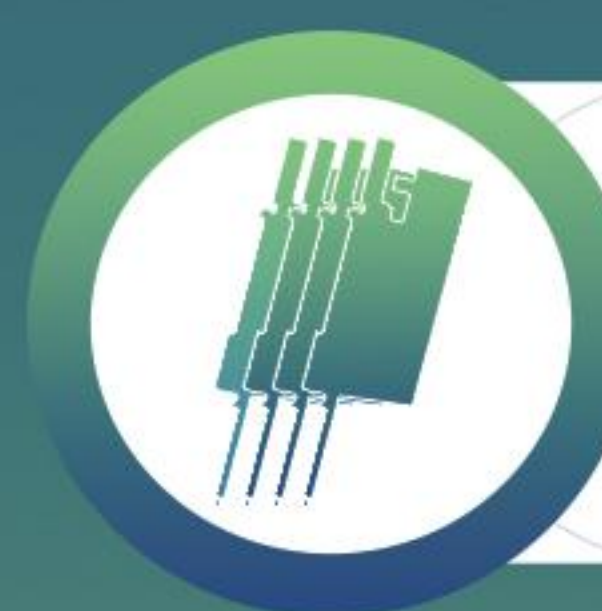


# SP16

## Pneumatic ADP

*Ultra-high Precision | Lightweight & convenient*  
*Intelligent Control | Wearproof & Anti-corrosion*

ADP (Air Displacement Pipettor) is a pipetting module developed by Keyto based on pneumatic suction and discharge technology with tip for pipetting. Which is suitable for automatic discharge and suction in the range of 2ul to 1000ul with different type tips. Keyto ADP provides a fast and reliable mechanical transfer module, as well as common communication interfaces, which are suitable for integration in pipetting platforms that are more sensitive to cross-contamination. It provides reliable and high-performance Pipetting module for all types of equipment in the pipetting unit of inspection equipment.



### · Flexible multi-connection

The installation center distance is 9mm for multi ADP module application.



### · Intelligent control

RS-232, RS-485 or CAN



### · Precision pipetting

2ul precision discharge and suction



### · Life cycle

1 million times



## Main Applications



## Function

### 1 Driver module

Brushless DC motor with encoder, ball screw rod, which can achieve precise discharge and suction

### 2 Control module

Equipped with powerful sensors and algorithms, which is suitable for various reagents and high-speed liquid level detection in high humidity environments, shielding the interference of liquid film and not being affected by high altitude environments.

### 3 Bracket module

Special aluminum oxide oxidation blackened bracket, quick disassembly and assembly structure, ultra-thin design, light and compact, suitable for multi-connection applications.

### 4 Cavity head module

Cavity head material is high chemical resistance and high abrasion resistance, with different specifications of tips, it can achieve single aspirate and single dispense, single aspirate multiple dispense and other application scenarios.

Optional Z axis, Splitting axis

## Technical features

**Multi-connected spacing:** When ADPs are used together, the center distance between the tips can be 9mm after loading tips.

**Anticipated life:** strict inspection procedures, unique sealing scheme, to ensure that the service life of the cylinder can reach more than 1 million times, and maintenance-free.

**Product function:** It can realize retreat and detection of tips, with liquid level detection, clot detection, empty suction error reporting, with the Z axis to achieve the liquid level following function.

**Prevention of cross-contamination:** Compatible with disposable tips, greatly reduced the possibility of cross-contamination.

## Specifications

Maximum displacement	1ml
Liquid level detection	Pressure-based detection
Weight	330g
Tip volume	Tip with filter element of 10ul/50ul/200ul/300ul/1ml
Dimensions	253*100*11.9mm

Communication and control	RS-232, RS-485 or CAN
Driver design	Hollow cup plus encoder motor plus ball screw
Medium temperature	15-40°C
Power requirement	24V DC
Anticipated life	1 million cycles