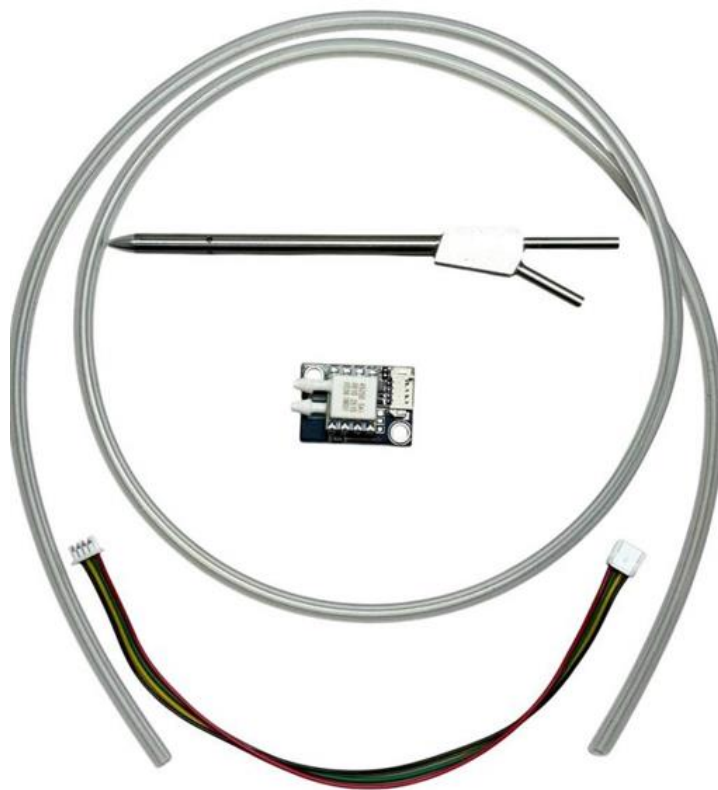


# AS-001

Airspeed Sensor

User Manual



rev: 260409  
Made in Taiwan

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## INTRODUCTION

The **AS-001 Airspeed Sensor** is a digital module designed specifically for fixed-wing and VTOL (Vertical Take-Off and Landing) UAVs. It measures the aircraft's airspeed to ensure that the UAV avoids stalling in windy conditions, takes off and lands safely, and completes flight missions. As a critical and reliable component, it is essential for the stable operation of both fixed-wing and VTOL UAVs

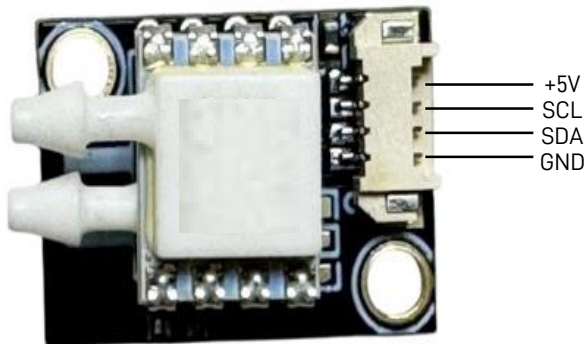
## PACKAGE CONTENTS

- 1x AS-001
- 1x Differential Pitot Tube
- JST-GH-4P to Wafer-4P cable
- Silicone Hose

## FEATURES

- Sensor: MS4525
- Measurement Accuracy:  $\pm 0.25\%$  SPAN
- Operating Pressure: 1 psi
- Maximum Pressure: 20 psi
- Communication Protocol: I2C
- Supported Firmware: Ardupilot, PX4
- Operating Voltage: 4.5 ~ 5.5 V
- Operating Temperature: -25 ~ 75°C
- Product Dimensions: 26 x 16 x 10.5 mm
- Product Weight: 3g (excluding pitot tube and connection wires)

## PIN DESCRIPTION

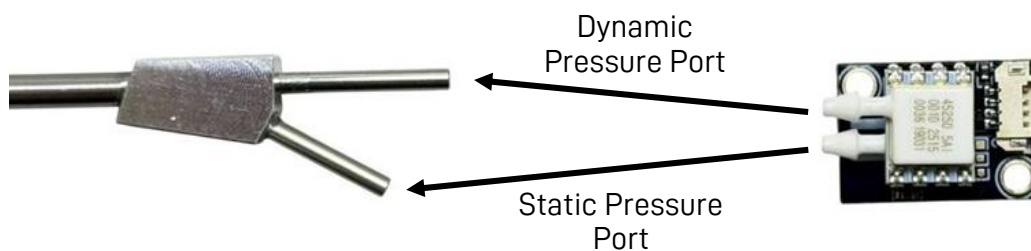


## CONNECTION

Use double-sided tape to attach the AS-001 airspeed sensor at the desired location. The Pitot tube should be installed in the direction of the incoming airflow of the UAV (typically on the nose or the left/right wing), with the air hole facing directly forward. Make sure it is positioned away from the propeller to avoid airflow disturbances caused by the propeller's rotation.

The AS-001 airspeed sensor comes with a silicone hose, which can be cut to the appropriate length depending on the installation requirements. The hose connection between the Pitot tube and the airspeed module is shown in the diagram below. Match the same type of air inlet ports using the hose.

Inside the fuselage, the hose can be secured to the inner walls using adhesive tape. Be careful when routing the hose to avoid bending or squeezing it, as this could obstruct airflow and lead to inaccurate airspeed measurements.



## WARRANTY

The SELLER warrants the **AS-001 Airspeed Sensor** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the AS-001 features and specifications is subject to change without further notice.**