

Application scenario

General



Civil use



Military use

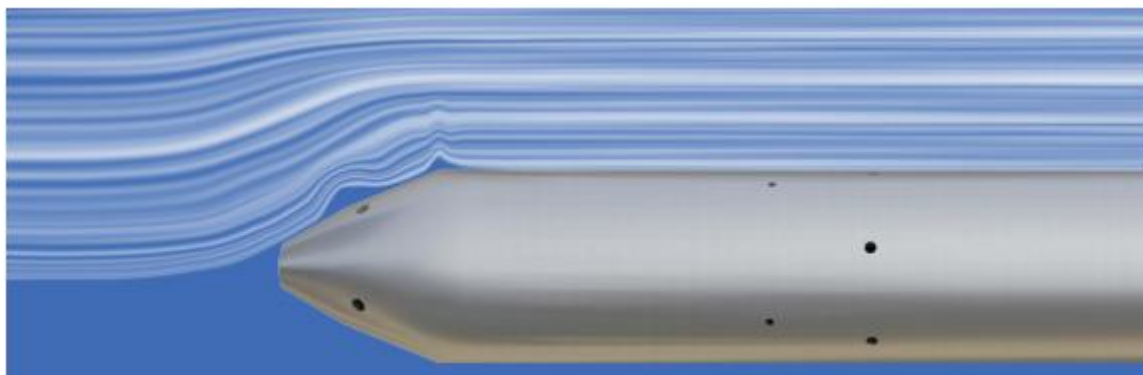


unmanned aerial vehicle(UAV)

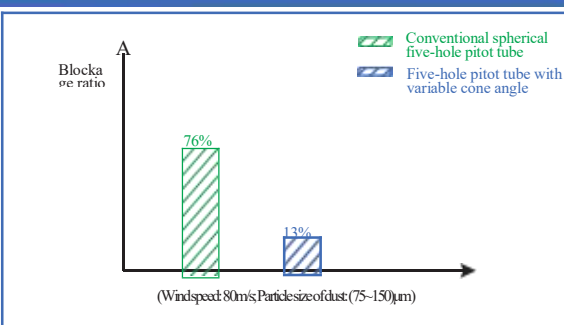


Innovative design, anti-blocking and stable measurement

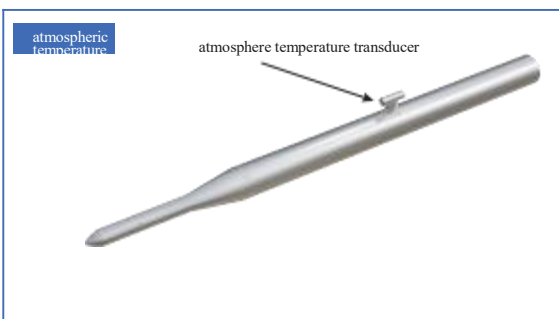
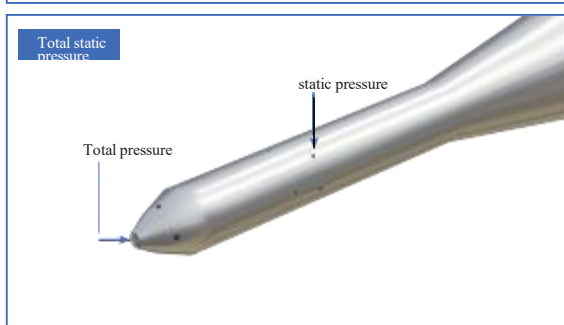
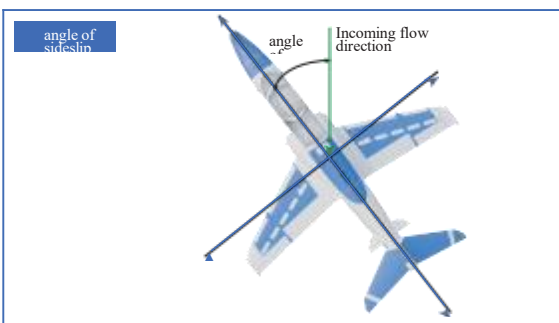
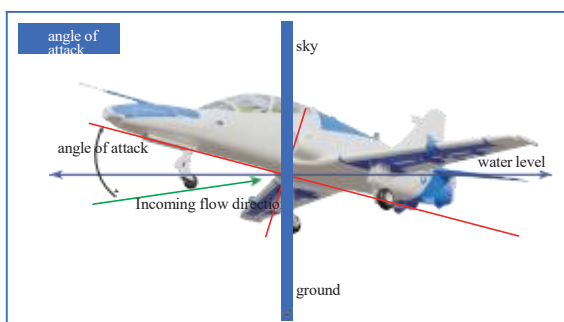
Based on the aerodynamic principle, a multi-aperture five-hole differential pressure pitot tube probe with variable cone angle is pioneered, which can effectively solve the problem that the air inlet is easy to block when the aircraft flies at low speed while ensuring the measurement accuracy, and escort the flight safety accurately.



Environmental test results of head velocity cloud image



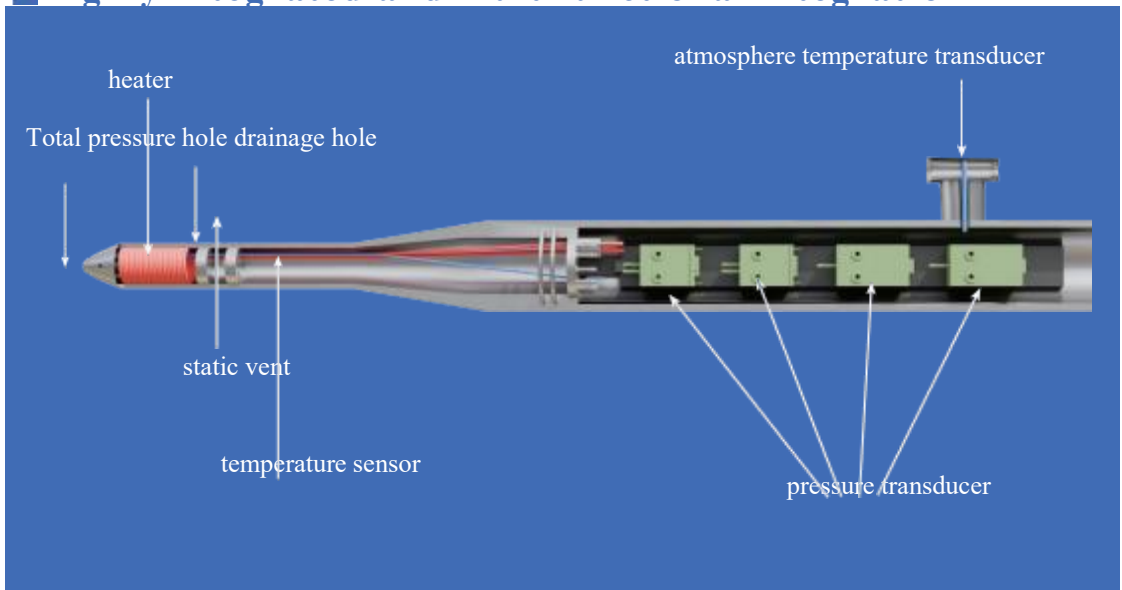
Accurate measurement with rich parameters



Five-hole differential pressure pitot tube WTN-5A100

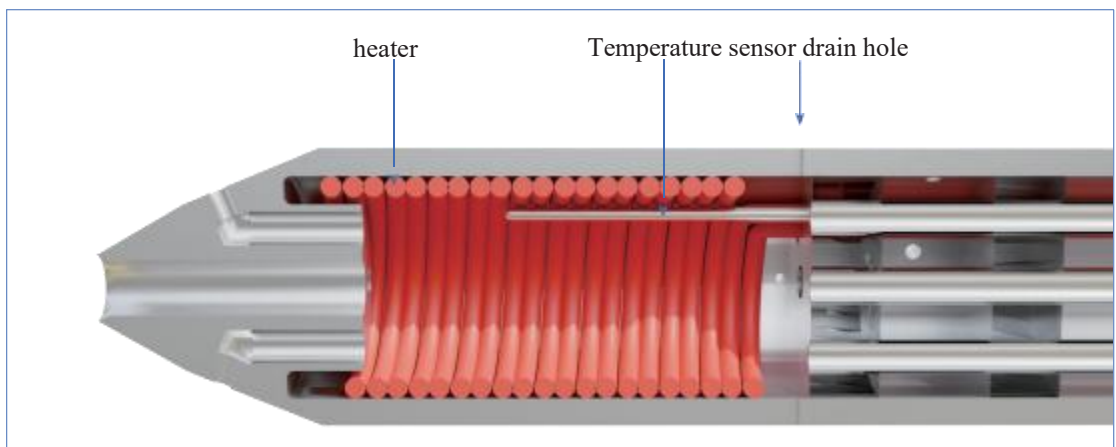
Five-hole differential pressure pitot tube is a high-performance measuring device specially designed for low-altitude aircraft, which can provide data of flying altitude (Hp), speed (CAS and TAS), angle of attack (AOA), sideslip angle (AOS), static pressure (Ps), dynamic pressure (Qc), total atmospheric temperature (TAT) and static temperature (OAT) for aircraft.

■ Highly integrated and multifunctional integration



■ Intelligent temperature-supplementing, cold-proof and deice

The adaptive PID algorithm dynamically adjusts the heating power, and matches the optimal temperature rise curve according to the real-time airspeed and the ambient temperature to prevent the probe from freezing or overheating. (9~30)VDC wide power supply, the maximum heating power is 280W, using PWM pulse width modulation technology, saving energy by 30% compared with conventional resistance heating.



■technical superiority

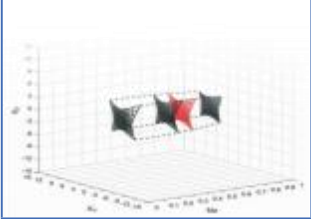
High and low temperature AI compensation algorithm

By compensating the temperature of the pressure sensor, the influence of temperature change on the sensor can be eliminated to the greatest extent, and the airflow pressure can be measured more accurately.



Variable Mach number three-dimensional Non-opposite linear interpolation algorithm

Through the "knowledge base" formed by a large number of data training and the "expert database" accumulated by years of experiments, the airflow speed at any airflow angle can be accurately calculated to ensure that the airflow angle and speed are calculated more accurately.



Calibration ability

The first private calibration wind tunnel laboratory approved by CNAS in China, with three wind tunnels, T-01, T-02 and T-03, and the wind speed range is:
(0.2-30) m/s;
(0.1-0.9) Mach;
(0.1-2.0) Mach.



■certification of qualification



Certification certificate of weapon equipment quality management system CNAS laboratory accreditation certificate CE certification certificate

■technical parameter

Parameter number	measuring range	Accuracy
Working temperature	(-35~55)°C	----
Dynamic pressure(Qc)	(0~245) hPa	≤0.2%FS
Static pressure(Ps)	(200~1100) hPa	≤0.2%FS
Angle of attack(AOA)	±30°	≤±0.5°
Side slip angle(AOS)	±30°	≤±0.5°

Accuracy is comprehensive accuracy, including aerodynamic error, sensor error and conversion error at high angle of attack and sideslip angle.



**Five-hole
differential
pressure pitot
tube WTN-5A100**



Address: No.1-17 Miaoling Industrial Park, Dalian
High-tech Industrial Park, China.

Tel: 4006896933

Website: www.windtunermeasure.com.

Mobile phone: 13322284835



公众号



视频号