



PITOT HASA

Heated Pitot measurement system



The **Pitot HASA** (Heated AirSpeed Altitude) is a plug-and-play solution for measuring airspeed and barometric altitude. The sensor probe features two pressure sensors, a ceramic heater, and an integrated temperature sensor. The temperature of the Pitot head is adjustable and regulated between 30°C and 50°C. The heater's power supply is galvanically isolated from the sensor electronics and supports voltages between 6V and 28V.

The integrated microcontroller uses the sensor data to provide various **DroneCAN** packets such as RawAir, TAS, and IAS. Additional CAN protocols can be implemented upon request. CAN bus termination can be conveniently enabled or disabled via software.

The Pitot probe is connected to the aircraft both mechanically and electrically via a push-pull connector. This allows it to be quickly and easily removed for transport. A small adapter interface inside the aircraft enables straightforward connection to the flight computer.

All parameters can be configured either via the **CAN bus** or using the **PowerBox Mobile Terminal**. In addition, updates to the **Pitot HASA** can be conveniently performed via the **PowerBox Mobile Terminal**.

FEATURES

- + Plug-and-play heated Pitot measurement system
- + Precise measurement of airspeed, altitude, rate of climb and distance
- + Push-pull connector system for easy disconnection from the aircraft
- + High-performance ceramic heating element
- + Temperature-controlled heating
- + Galvanically isolated circuit for the heater
- + Wide voltage range for the heater: 6.0V–28.0V
- + Pressure sensors with the latest MEMS sensor technology
- + Speed measurement up to approx. 850 km/h with 1 km/h resolution
- + Complete electronics fully integrated into the Pitot tube
- + Fast digital filters for delay-free data acquisition without noise
- + DroneCAN interface for easy integration
- + CAN bus messages can be enabled and disabled via software
- + Adjustable data rate for CAN messages
- + CAN termination can be enabled via software
- + Lightweight aluminum/carbon construction
- + Supported RC systems: PowerBox P²BUS
- + Parameter settings via CAN bus or Mobile Terminal
- + Updatable via the Mobile Terminal

SPECIFICATION

Operating voltage control system:	4.0V – 9.0V
Operating voltage heating system:	6.0V – 28.0V
Current drain control system:	max. 35 mA
Current drain heating system:	Voltage / 9 ohms
Heating-up time 6V:	120 s (from -40°C to +40°C)
Heating-up time 24V:	10 s (from -40°C to +40°C)
Supported bus systems:	DroneCAN, PowerBox P²-BUS, others on request
Speed:	max. 850 km/h
Resolution speed:	1 km/h (from 10 km/h)
Resolution altitude:	0.1 m
Dimensions:	10 mm x 165 mm
Weight:	48 g (incl. interface)
Temperature range:	-40°C to +85°C

DIMENSIONS

