

Technical Specifications for Pitot probes

Application: Pitot probe and accessories must be mountable on an unmanned aerial vehicle (2 nos.)

Number of ports: 5 tip pressure ports with static ring for wind velocity measurement

Wind speed measurement range: 0 - 60 m/s or more

Wind speed measurement error: less than 1% or 1 m/s

Wind direction range: acceptance angle up to +/- 20 degrees

Wind direction error: less than 1 degree

Sampling rate: 100 Hz or more

Computer: Integrated air data computer and temperature sensor with GPS and INS capability. To provide attitude, position, velocity and acceleration of the vehicle, and stream to a flight controller or on-board memory. Must weigh less than 150 grams and draw less than 2.5 W of power.

Data: To be transmitted live to a flight controller or on-board memory

Power: Computer to draw 2.5 W or lesser

Calibration: Calibration charts in the operating wind speeds must be made available

Documentation: Sensor and aerodynamic certification documents to be made available

Additional Requirements:

1. Vendors should provide continuous technical support and maintenance of equipment.
2. Vendors have to provide warranty for a minimum of one year
3. Vendors must have sufficient experience in supplying equipment in reputed organizations for research purposes. They must provide references like Purchase order Copies of end users whom we can contact for their experience with the supplied machine. Performance Certificate and experience details of the end users will also be used as a criterion for the selection of bids that meet technical requirements.
4. Vendors must provide detailed documentation for the equipment.
5. Vendors may be called to visit and give presentation/demonstration on the equipment after opening the technical bid. They need to provide the approximate date for this presentation in the bid. The time period for this presentation will be intimated at a later date
6. Vendors must provide training to our technical staff for using the equipment.
7. All the expenses for installation, training and post sales technical support will be borne by the vendor