DATA SHEET: WS-25 Air Velocity Transmitter

High-Precision Sensor for Continuous Airflow Monitoring

1. PRODUCT OVERVIEW

The **WS-25** is a high-precision air velocity transmitter engineered for exceptional responsiveness to airflow dynamics. Capable of accurate measurements even at velocities approaching 0 m/s, it features a 4-digit LCD for clear on-site visualization. With multiple signal output options and flexible installation configurations, it is an ideal solution for Building Automation Systems (BAS), HVAC control, and industrial process monitoring.

2. KEY FEATURES

- **Ultra-Low Velocity Sensitivity:** High-accuracy detection even in near-zero airflow conditions.
- **Flexible Installation:** Supports both duct-mount (pipeline) and split-type installations to suit diverse application requirements.
- **Versatile Signal Outputs:** Standard industrial outputs including 4-20mA, 0-10V, and RS485 (Modbus) for seamless system integration.
- **Customizable Hardware:** Adjustable probe lengths (50–600 mm) and cable lengths (0.5–10 m) tailored to specific site needs.
- **Industrial-Grade Housing:** IP65-rated enclosure with PG9 waterproof connectors for reliable performance in demanding environments.
- **Real-Time Visualization:** Integrated 4-digit LCD provides instantaneous local monitoring of airflow data.

3. TECHNICAL SPECIFICATIONS

Feature	Specification
Measurement Range	0-2 / 0-10 / 0-20 / 0-30 / 0-40 m/s (Customizable)
Accuracy (at 20°C)	±(0.05m/s + 2%mv) to ±(0.3m/s + 3%mv) depending on range
Resolution	0.01 m/s
Response Time	≤ 2 s
Output Signals	4-20mA, 0-10V, RS485
Power Supply	DC 12 - 24V (<80mA)
Ingress Protection	IP65
Probe Length	200 mm (Standard) / 50 - 600 mm (Customizable)
Cable Length	1 m (Standard) / 0.5 - 10 m (Customizable)

Feature	Specification
Dimensions	90 × 90 × 30 mm

4. APPLICATIONS

- **HVAC Control:** Precision monitoring and regulation of airflow in ventilation ducts.
- **Building Automation:** Integration into BMS for energy-efficient climate and air quality control.
- **Cleanroom Monitoring:** Validating supply air and exhaust flows in controlled environments.
- **Laboratory Safety:** Ensuring proper face velocity and airflow in fume hoods and laminar flow units.

5. STANDARD ACCESSORIES

- WS-25 Transmitter Unit & Sensor Probe
- Mounting Flange / Bracket Kit
- **Factory Calibration Report**
- User Manual

Manufactured by:
Honri Airclean Technology (Suzhou) Co., Ltd.