

DATA SHEET: DP-25 Differential Pressure Transmitter

High-Precision Monitoring for Cleanroom and Industrial Environments

1. PRODUCT OVERVIEW

The **DP-25** is a high-precision differential pressure transmitter equipped with a premium TE (Tyco) sensor. Designed for versatility, it is available in multiple range specifications to accommodate diverse application needs. With its advanced circuit architecture and robust structural design, the DP-25 provides rapid and accurate measurement of air or non-corrosive gases. The integrated 4-digit LCD ensures clear local visualization, making it an essential component for critical environment control.

2. KEY FEATURES

- Premium Sensor Technology:** Utilizes TE (Tyco) high-precision sensors for superior measurement stability and reliability.
- Low-Drift Performance:** Engineered for anti-vibration and low-drift operation with a convenient on-site zero calibration function.
- Integrated Visualization:** Features a 4-digit LCD screen for clear and intuitive real-time pressure display.
- Stable Readings:** Incorporates advanced filtering algorithms to ensure stable data output even in fluctuating environments.
- Regulatory Compliance:** Fully complies with GMP standards and FDA requirements (US and EU) for cleanroom environments.
- Versatile Connectivity:** Supports multiple industrial output signals including RS485 (Modbus), 4-20mA, and 0-10V for seamless integration into BMS/PLC systems.
- Rugged Enclosure:** IP65-rated PVC housing provides excellent protection against dust and moisture.

3. TECHNICAL SPECIFICATIONS

Feature	Specification
Measurement Ranges	0-±125 / 250 / 500 / 1000 / 2500 / 5000 Pa
Accuracy	From ±0.6 Pa (at 125 Pa) up to ±12.5 Pa (at 5000 Pa)
Resolution	0.1 Pa (≤ 500 Pa ranges) / 1 Pa (> 500 Pa ranges)
Maximum Pressure	100 psi
Output Signals	RS485, 4-20mA, 0-10V
Output Load	Voltage: > 1000 Ω / Current: < 500 Ω

Feature	Specification
Measuring Medium	Air or neutral/non-corrosive gas
Ingress Protection	IP65
Power Supply	DC 12 ~ 24V / 100mA
Dimensions (LWH)	90 × 90 × 30 mm
Housing Material	PVC

4. APPLICATIONS

- **Cleanroom Monitoring:** Ensuring proper room pressure hierarchy in pharmaceutical and electronics manufacturing.
- **HVAC Systems:** Real-time monitoring of filter status and duct pressure.
- **Building Automation:** Integration into BMS for energy-efficient climate control.
- **Industrial Ventilation:** Measuring exhaust and supply air pressure in labs and factories.

5. STANDARD ACCESSORIES

- DP-25 Transmitter Unit
- **1-meter Flexible Tubing**
- **Factory Calibration Report**
- User Manual

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