DIFFERENTIAL PRESSURE TRANSMITTERS
DPT-Dual-MOD Series

Differential pressure transmitter with two pressure sensors for air and an Input terminal for two analog inputs for external signal conversion into Modbus

DPT-Dual-MOD combines two differential pressure transmitters into one device. It offers a possibility to measure pressure from two different points. It has a Modbus interface and an Input terminal. When using the Input terminal, temperature transmitters can be replaced with temperature sensors. As a result you will save in costs of the devices and in the installation costs.

SIMILAR PRODUCTS

- DPT-2W series differential pressure transmitters with 4–20 mA 2-wire configuration
- DPT-R8 series 8-range differential pressure transmitters
- DPI series electronic differential pressure switches
- PS series mechanical differential pressure switches
- DPT-FLOW series airflow transmitters

APPLICATIONS

DPT-Dual-MOD series devices are commonly used in HVAC/R systems for:

- fan, blower and filter monitoring
- pressure and flow monitoring
- valve and damper control
- pressure monitoring in cleanrooms

MODEL SUMMARY

	DPT-Dual-MOD-2500		**DPT-Dual-MOD-7000**	
Measurement ranges (Pa)	-250...2500		-250...7000	
Description	**Model**	**Product code**	**Model**	**Product code**
Differential pressure transmitter with two pressure sensors, Modbus configuration and display	DPT-Dual-MOD-2500-D	120.007.006	DPT-Dual-MOD-7000-D	120.016.006

DIFFERENTIAL PRESSURE TRANSMITTERS
DPT-Dual-MOD Series

Differential pressure transmitter with two pressure sensors and Modbus configuration

SPECIFICATIONS

Performance

Accuracy (from applied pressure):
±1.5 % + 1 Pa
(Including: general accuracy, temperature drift, linearity, hysteresis, long term stability and repetition error)
Response time:
1...20 s selectable via menu
Max pressure:
400 kPa

Communication

Protocol: MODBUS over Serial Line
Transmission Mode: RTU
Interface: RS485
Byte format (11 bits) in RTU mode:
Coding System: 8-bit binary
Bits per Byte:
1 start bit
8 data bits, least significant bit sent first
1 bit for parity
1 stop bit
Baud rate: selectable in configuration
Modbus address: 1–247 addresses selectable in configuration menu

Zero point calibration options:
- Manual pushbutton autozero
- Via Modbus write coil

Technical Specifications

Media compatibility:
Dry air or non-aggressive gases
Measuring units on display:
Selectable via menu (Pa, mbar, inchWC, mmWC, psi)
Measuring element:
Piezoresistive
Environment:
Operating temperature: -10...+50 °C
Storage temperature: -20...+70 °C
Humidity: 0 to 95 % rH

Physical

Dimensions:
Case: 102.0 x 71.5 x 36.0 mm
Weight:
150 g, with accessories 290 g
Mounting:
2 each 4.3 mm screw holes, one slotted
Materials:
Case: ABS
Lid: PC
Pressure inlets: Brass
Duct connectors: ABS
Tubing: PVC
Protection standard:
IP54
Display:
2-line display (12 characters/line)
Line 1: active measurement, inlet A
Line 2: active measurement, inlet B

Electrical Connections:
4+3 spring load terminals, max 1.5 mm²
Cable Entry: M20
Pressure connections:
Male ⦰ 5,0 mm and 6,3 mm

Electrical

Supply voltage:
24 VAC or VDC ± 10 %
Power consumption:
< 1.3 W
Output signal:
via Modbus

Conformance

Meets requirements for CE marking:
EMC directive 2004/108/EC
RoHS Directive 2002/95/EC

How to generate a model?

Example:	Product Series			
DPT-Dual-MOD-2500-D	DPT-Dual-MOD	Differential pressure transmitter with two pressure sensors and Modbus configuration		
		Highest available measurement range		
		-2500	-250...2500 Pa	
		-7000	-250...7000 Pa	
			Display	
			-D	With display
Model	DPT-Dual-MOD	-2500	-D	