

## 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	
<b>Description</b>	<b>Model</b>	<b>Product code</b>	<b>Model</b>	<b>Product code</b>
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:**

MEMS

**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 mm<sup>2</sup>

Cable Entry: M20

**Pressure connections:**

Male  $\varnothing$  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 2014/30/EU

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	
		<b>Highest available measurement range</b>	
		-2500	-250...2500 Pa
		-7000	-250...7000 Pa
		<b>Display</b>	
	-D	With display	
Model	DPT-Dual-MOD	-2500	-D