



Series 475

# Mk III Handheld Digital Manometer

Ranges from 1 in. w.c. to 150 psid, ±0.5% Accuracy



- New LOW Range Option 0-1.000 in. w.c.
- Measures Positive, Negative and Differential Pressures
- Rugged, Extruded Aluminum Case
- Lightweight, Fast and Easy to Use
- Selectable English/Metric Units
- FM Approved

The Dwyer® Series 475-FM Mark III Handheld Digital Manometer is ideal for field calibration, monitoring or trouble shooting HVAC systems, clean rooms, or a wide range of other low pressure pneumatic systems. This handy instrument measures positive, negative or differential pressures of air and natural gases in ranges from 1 in. w.c. (0.249 kPa) to 150 psid (10.34 bar). The Series 475-FM is approved and is intrinsically safe for hazardous locations, Class 1, Div. 1, Group A, B, C, D, T4. Its simple operation and easy to read digital display make it an indispensable test instrument for the plant engineer, industrial hygienist and HVAC technician. When used with a Dwyer® Pitot tube (see Flow and Air Velocity), the Series 475-FM Mark III can also be used as an air velocity gage. See the complete 475-1-FM-AV kit described below.

The Series 475-FM Mark III is housed in a durable extruded aluminum case with its solid state circuitry mounted on a tough fiberglass epoxy circuit board. To meet the most demanding applications and to provide stability of instrument reading, the 1 in. w.c. range is compensated for position sensitivity through the use of a unique patented dual sensor system. A standard 9 volt battery provides up to 100 hours of operation. Dual push pads on the front panel control on-off, auto zero, and pressure unit selection. No set-up or leveling. The large 0.42" LCD display is easy to read, minimizing data collection errors. Units include a "low battery" indicator. The pressure sensor used is a highly stable silicon piezoresistive device. Standard connections are dual sized for 1/8" or 3/16" I.D. vinyl or rubber tubing. Complete instructions are conveniently printed on rear of housing.



## SPECIFICATIONS

**Service:** Air and compatible combustible gases.

**Wetted Materials:** Consult factory.

**Accuracy:** ±0.5% F.S., 60 to 78°F (15.6 to 25.6°C); ±1.5% F.S. from 32 to 60°F and 78 to 104°F (0 to 15.6°C and 25.6 to 40°C).

**Pressure Hysteresis:** ±0.1% of full scale.

**Pressure Limits:** See chart.

**Temperature Limits:** 0 to 140°F (-17.8 to 60°C).

**Compensated Temperature Limits:** 32 to 104°F (-0 to 40°C).

**Storage Temperature Limits:** -4 to 176°F (-20 to 80°C).

**Display:** 0.42" (10.6 mm) 4 digit LCD.

**Resolution:** See chart.

**Power Requirements:** 9 volt alkaline battery. Battery not connected.

**Weight:** 10.8 oz (306 g).

**Connections:** Two barbed connections for use with 1/8" (3.18 mm) or 3/16" (4.76 mm) I.D. tubing. Two compression fittings for use with 1/8" (3.18 mm) I.D. x 1/4" (6.35 mm) O.D. tubing for 475-7-FM & 475-8-FM only.

**Agency Approvals:** FM, CE.

**A-402A Carrying Case** — Tough gray nylon pouch protects any Series 475 Manometer. Double zippered for quick and easy access. With belt loop that snaps closed.

7-1/2"H x 3"W x 2-1/4"D (191 x 76 x 57 mm)



**475-AV AIR VELOCITY KIT** — Includes the Series 475-FM Manometer, two A-303 static pressure tips two 9 ft. lengths 3/16" I.D. rubber tubing, no. 166-6-CF Pitot tube, A-397 step drill, A-532 air velocity slide chart and instruction bulletin H-11, all packed in a tough, molded plastic carrying case with die cut foam liner. To order, add AV suffix to any standard 475 model no.

Example: 475-1-FM-AV  
475-000-FM-AV

Model Number	English Range	Metric Range	Maximum Pressure
475-000-FM	0-1.000 in w.c.	.2491 kPa	5 psig
475-00-FM	0-4.000 in w.c.	0.996 kPa	5 psig
475-0-FM	0-10.00 in w.c.	2.491 kPa	5 psig
475-1-FM	0-20.00 in w.c.	4.982 kPa	10 psig
475-2-FM	0-40.00 in w.c.	9.96 kPa	10 psig
475-3-FM	0-200.0 in w.c.	49.82 kPa	30 psig
475-4-FM	0-10.00 psi	.6895 bar	30 psig
475-5-FM	0-20.00 psi	1.379 bar	60 psig
475-6-FM	0-30.00 psi	2.069 bar	60 psig
475-7-FM	0-100.0 psi	6.895 bar	150 psig
475-8-FM	0-150.0 psi	10.34 bar	200 psig