



MODELS 471B-1/473B-1/485B-1 | HANDHELD TEST INSTRUMENTS



BENEFITS/FEATURES

- Universal base handheld compatible with Dwyer AP1 thermo-anemometer, RP1 thermo-hygrometer, and VP1 100 mm thermo-anemometer wired probes (sold separately)
- Visible in any condition due to high contrast and backlit LCD display
- Able to store up to 99 readings for later evaluation
- Easy to transport when paired with the rugged aluminum case or protective soft case

APPLICATIONS

- Residential balancing
- Commercial air balancing
- HVAC inspections
- Industrial process and dust collection system verification

DESCRIPTION

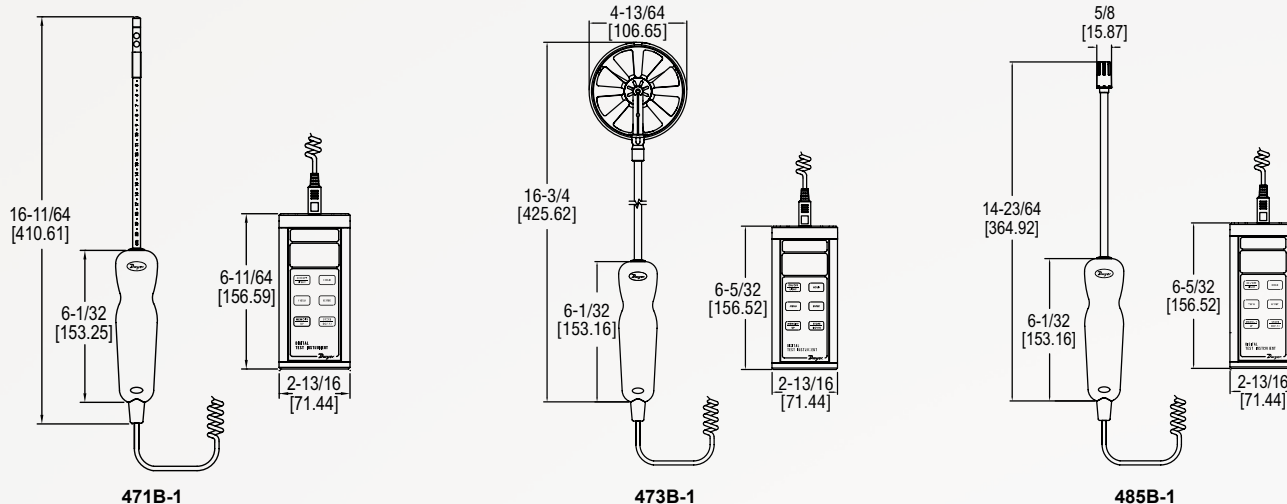
Models 471B-1/473B-1/485B-1 Handheld Test Instruments are versatile and compact units that quickly and easily measure a variety of air quality standards in imperial or metric units. Model 471B-1 is provided with the Dwyer AP1 thermo-anemometer probe and is able to measure air velocity or volumetric air flow, as well as air temperature. Model 473B-1 is provided with Dwyer VP1 100 mm vane thermo-anemometer probe and is able to measure air velocity or volumetric air flow, as well as air temperature and humidity. Model 485B-1 is provided with Dwyer RP1 thermo-hygrometer probe and is able to measure relative humidity and air temperature.

AP1, RP1, and VP1 probes are automatically recognized when plugged into the handheld, and can be interchanged without needing to adjust calibration

SPECIFICATIONS

Service	Dry, clean air.
Temperature Limits	Process: -20 to 212°F (-29 to 100°C); Ambient: 5 to 125°F (-15 to 51°C).
Display	4.5 digit backlit display.
Air Velocity Range	471B-1: 45 to 6000 FPM (0.23 to 30 m/s); 473B-1: 40 to 5000 FPM (0.32 to 25 m/s); 485B-1: N/A.
Air Velocity Accuracy	471B-1: $\pm 3\%$ FS; 473B-1: $\pm 1.5\%$ of reading ± 20 FPM (± 0.1 m/s) [0.25 to 10 m/s], $\pm 1.5\%$ of reading ± 40 FPM (± 0.2 m/s) [10 to 20 m/s], $\pm 1.5\%$ of reading ± 60 FPM (± 0.3 m/s) [20 to 25 m/s]; 485B-1: N/A.
Volumetric Air Flow Range	471B-1/473B-1: 19,999 in selected flow units; 485B-1: N/A.
Temperature Range	471B-1: -40 to 212°F (-40 to 100°C); 473B-1: -20 to 212°F (-29 to 100°C); 485B-1: -20 to 140°F (-28 to 60°C).
Temperature Accuracy	471B-1: $\pm 0.5^\circ\text{F}$ ($\pm 0.28^\circ\text{C}$) [32 to 122°F], $\pm 1.5^\circ\text{F}$ ($\pm 0.83^\circ\text{C}$) [Rest of range]; 473B-1/485B-1: $\pm 0.9^\circ\text{F}$ @ 77°F ($\pm 0.5^\circ\text{C}$ @ 25°C).
Relative Humidity Range	471B-1: N/A; 473B-1/485B-1: 0 to 100% RH.
Relative Humidity Accuracy	471B-1: N/A; 473B-1/485B-1: $\pm 2\%$ RH @ 77°C (25°C) [10 to 90% RH].
Probe Length	8" (203 mm).
Cable Length	28" (71 cm) retracted; 6' (183 cm) extended.
Power Requirements	9 V alkaline battery, installed non-functional, user replaceable.
Weight	471B-1: 16 oz (454 g); 473B-1: 18.4 oz (521 g); 485B-1: 16 oz (454 g).
Agency Approvals	CE.

DIMENSIONS



HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

SERIES	PROBE LENGTH	OPTIONS
471B: Hot wire thermo-anemometer test instrument		-COC: Certificate of calibration (473B only)
473B: 100 mm vane thermo-anemometer test instrument		-FC: Factory calibration (473B only)
485B: Thermo-hygrometer test instrument		-NIST: NIST traceable calibration certificate
	-1: 8" (203 mm)	

ACCESSORIES

Model	Description
A-47X-BOOT	Protective magnetic rubber boot
A-VPX-CKIT	Vane hood kit
AP1	Hot wire thermo-anemometer probe with coiled cable
RP1	Thermo-hygrometer probe with coiled cable
UHH-C2	Hard carrying case
VP1	100 mm vane thermo-anemometer probe with coiled cable



Hitma Instrumentatie

www.hitma-instrumentatie.nl
info@hitma-instrumentatie.nl
+31 (0)297 - 514 833

België / Belgique

www.hitma-instrumentatie.be
info@hitma-instrumentatie.be
+32 (0)2 - 387 28 64



DWYER INSTRUMENTS, INC.

©Copyright 2021 Dwyer Instruments, Inc.
Printed in U.S.A. 6/21

DS-471B-1_473B-1_485B-1 Rev. 2

Important Notice: Dwyer Instruments, Inc. reserves the right to make changes to or discontinue any product or service identified in this publication without notice. Dwyer advises its customers to obtain the latest version of the relevant information to verify, before placing any orders, that the information being relied upon is current.