

Air Leakage Test Systems Selector



rev-2011-02-16

Choose the perfect system from our wide range

Simple cloth panel systems for lower cost



Modular, hard panel systems for fast, professional testing



Versatile low-flow fan systems for residential ducts or tight houses



Folding hard panels handle up to 3 high power fans for testing large buildings



Retrotec's exclusive Flex-duct system for measuring zone to zone leakage by pressure neutralization



Made in Everson, WA USA 

Digital Gauge

DM-2 MkII Digital Gauge

The DM-2 MkII is more than just a digital gauge. It is the advanced control center at the heart of every Retrotec system. It has every imaginable feature needed to make testing faster, easier, and more accurate, without the need for a computer, yet is still simple to use.



Fan Control

Manual control

Plug this manual control unit into any Retrotec fan to adjust the speed with the simple turn of the dial. An on/off switch allows speed to be restored to the previous setting.



Automatic speed control

Set to any percent speed and Jog up or down in 1% or 5% increments.



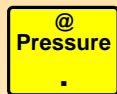
Cruise Control

Set any pressure, and then Jog up or down in 5 Pa increments for fast multipoint tests.



... or super-fast !

...now use the @ key to immediately extrapolate to the exact pressure selected by the "Jog" key, in order to acquire a set of test points as fast as they can be written down.



Laptop control

Advanced USB connection to any laptop allows for the use of a wide variety of software.



Control from a distance

The standard gauge-to-fan cable is 20', but 70' extensions allow control from any distance.

Fan Performance

DU-220 duct & tight house fan

This 10 inch (30 cm) fan features an accurate flow nozzle that is unaffected by back pressure, or being attached to a flex-duct. Test ducts, tight houses and enclosures in either direction without changing the set up.



2350 residential fan



This 24 inch (60cm) fan is ideally suited for testing most houses and some small commercial and industrial buildings.

3300SR large building fan



This Retrotec exclusive fan is super powerful and super stable. Its custom industrial strength motor is designed for continuous operation and will never over-heat.

The 3300 SR fans are Self Referenced making them the ideal building science tool since they cannot be hooked up incorrectly and always reference the flow properly even when attaching a flex-duct to create the world's largest duct tester, or when performing floor-at-a-time high rise building tests.

Door Panels

Cloth Panel for economy

Our Standard aluminum frame with cloth panel will fit any residential doorway. Ergonomic knobs, sturdy cam levers, and numbered frame pieces make this frame easy to use.



Modular Panel for flexibility

Retrotec's unique hard panels fit the widest variety of doorways. They're lightweight, quick and easy to set up, and provide an impressive professional appearance.



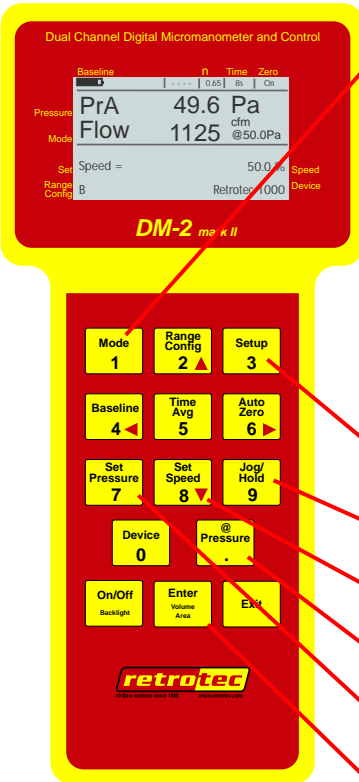
Three-Fan Panel for large buildings

Maximize airflow through one doorway with a folding 3-fan panel that can be carried under the arm. Set up in minutes. Use the included blanking panels if only one or two fans are needed.



Digital Gauge

The Retrotec DM-2 displays every possible result with manual and fully automatic (or computerized) fan speed control.



Mode: Supported units of measurement

Pressure: Pascals, inches H ₂ O, lb/ft ²	PrB	53.5 Pa
Flow: cfm, l/s, m ³ /s, m ³ /h	Flow	253.5 cfm
Flow per area: cfm/ft ² , l/s/m ² , cfm/100ft ² , m ³ /h/m ² , cfm/1000ft ²	Flow/Area	0.25 cfm/100ft ² @75.0Pa
Leakage Area - EqLA (Canadian) and/or EFLA (US): cm ² , in ² , ft ²	EqLA	12.8 ft ² @10.0Pa
EqLA and EFLA per area: in ² /100ft ² , cm ² /m ² , in ² /in ²	EqLA/Area	1.15 in ² /100ft ² @10.0Pa
Air changes per hour according to volume entered: /hr	Air Chg	2.7 /h
Hole Flow: cfm, l/s, m ³ /s, m ³ /h	Hole Flow	103.7 cfm

Setup:

Add/remove modes and devices

Jog/Hold:

Adjust up/down in 5Pa increments for multi-point tests

Set Speed:

Set to any % speed

@ Pressure:

Immediate results at any desired test pressure

Set Pressure:

Cruise control to any pressure

Volume Area:

For Air-changes and ELA per area

Accuracy:

+/- 2.5% with formal calibration

★ Use an unlimited length of ethernet cable for fan control.

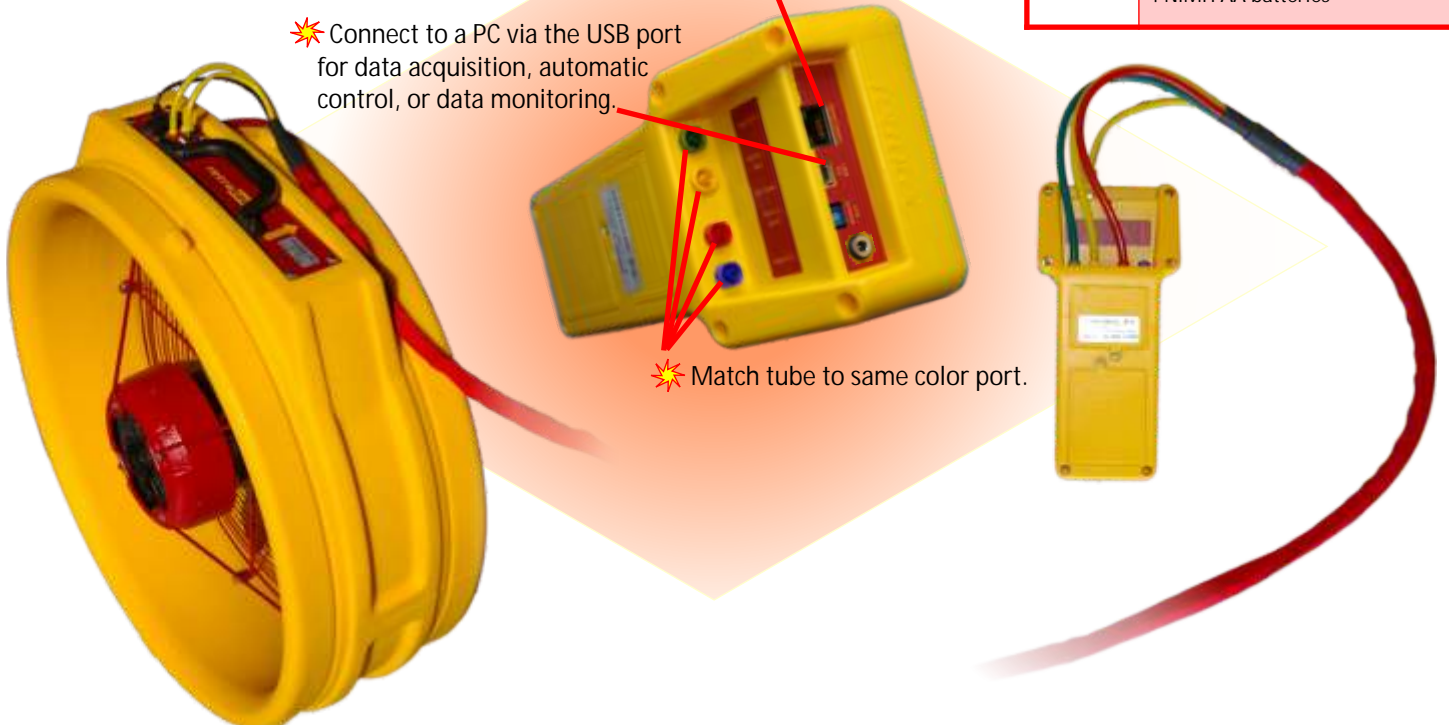
★ Connect to a PC via the USB port for data acquisition, automatic control, or data monitoring.

★ Match tube to same color port.



Dimensions

Weight	14oz/397g
Size	8.75 x 4.25 x 3in 22.2 x 10.8 x 7.6cm
Power	AC adapter 4 NiMH AA batteries



Fan Control

3 sizes of motor in
2 sizes of housing

Choose a 0.25 hp motor in a 10 inch (30cm) housing, or a 0.75 hp or 2 hp motor in a 25 inch (75 cm) fan shell housing



Tough construction

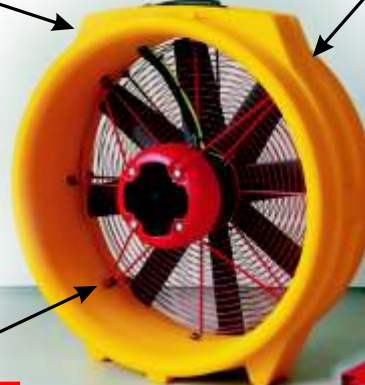
Space age construction uses a hollow fan shell filled with structural foam for superior strength and durability.



Standard fan



Low-flow fan



High-power fan and Drive

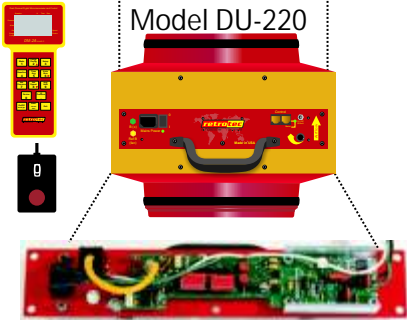
8-point mount

Super stable mounting maintains fan alignment under the most stressful conditions. Attachment points are molded in permanently, so there is nothing that can come loose.

Model 2350



Model DU-220



Advanced Control
Retrotec ups the ante with its regulated speed control to eliminate the speed fluctuations experienced with typical manual controls.

Super Advanced Control
The unique variable speed drive provides advanced speed control with Retrotec's 2hp high-speed fan. It generates faster speed control with less than 0.1% speed variation. Use a 100 to 280V, 50 to 60 Hz wall outlet (non GFCI).

Model 3300SR



Model DU-220 fan
Low-flow

Dimensions: 14" x 14" x 12" (35 x35 x30 cm)

Weight: 10 lb (4.5 kg)

Power in: Available in 115 Volt or 230 Volt, 185 Watts

Motor & fan blade: EBM Backward Curved Impeller

Model 2350 fan
Standard

Dimensions: 26" x 25.5" x 9.5" (66 x 65 x 24 cm)

Weight: 34 lb (15.4 kg)

Power in: Available in 115V or 230V, 50 or 60 Hz, 1000 Watts

Motor & fan blade: ¾ hp, PSC motor w/ 8 blade fan

Model 3300SR fan
High-power

Dimensions: 26" x 25.5" x 9.5" (66 x 65 x 24 cm)

Weight: Fan: 37 lb (16.8 kg)

Single Phase power in: Auto-switches 120V, 15A & 240V 8A, 1ph

Motor & fan blade: 2.0 hp, 3 phase w/ 8 blade fan

Fan Performance

Maximum Fan Flow Rates	Flow into:	CFM	liters/s	m ³ /h
DU-220 fan <i>reduce by 15% for 50Hz</i>	Free Air (no flex duct)	680	321	1155
	50 Pa	5 to 515	2 to 243	8 to 875
Model 2350 fan <i>reduce by 15% for 50Hz</i>	Free Air	6,300	2,973	10,704
	50 Pa	5 to 5,600	2 to 2,643	8 to 9,514
Model 3300SR fans	Free Air	8,500	4,012	14,440
	50 Pa	5 to 8,300	2 to 3,917	8 to 14,100
	300 Pa	4,000	1,888	6,796

Flow-restrictor plates allow one fan to test a wide range of enclosures, from super-leaky to super-tight. Model 2350 and 3300SR fans include 11 flow ranges (*far right*) to provide accurate results over the widest range of enclosures. Test the tightest (5 CFM) or leakiest (600 CFM) residential ducts with the three ranges included with the DU-220 fan (*right*). Select the Range Configuration on Retrotec's DM-2 digital gauge for instant and accurate results in any desired units.

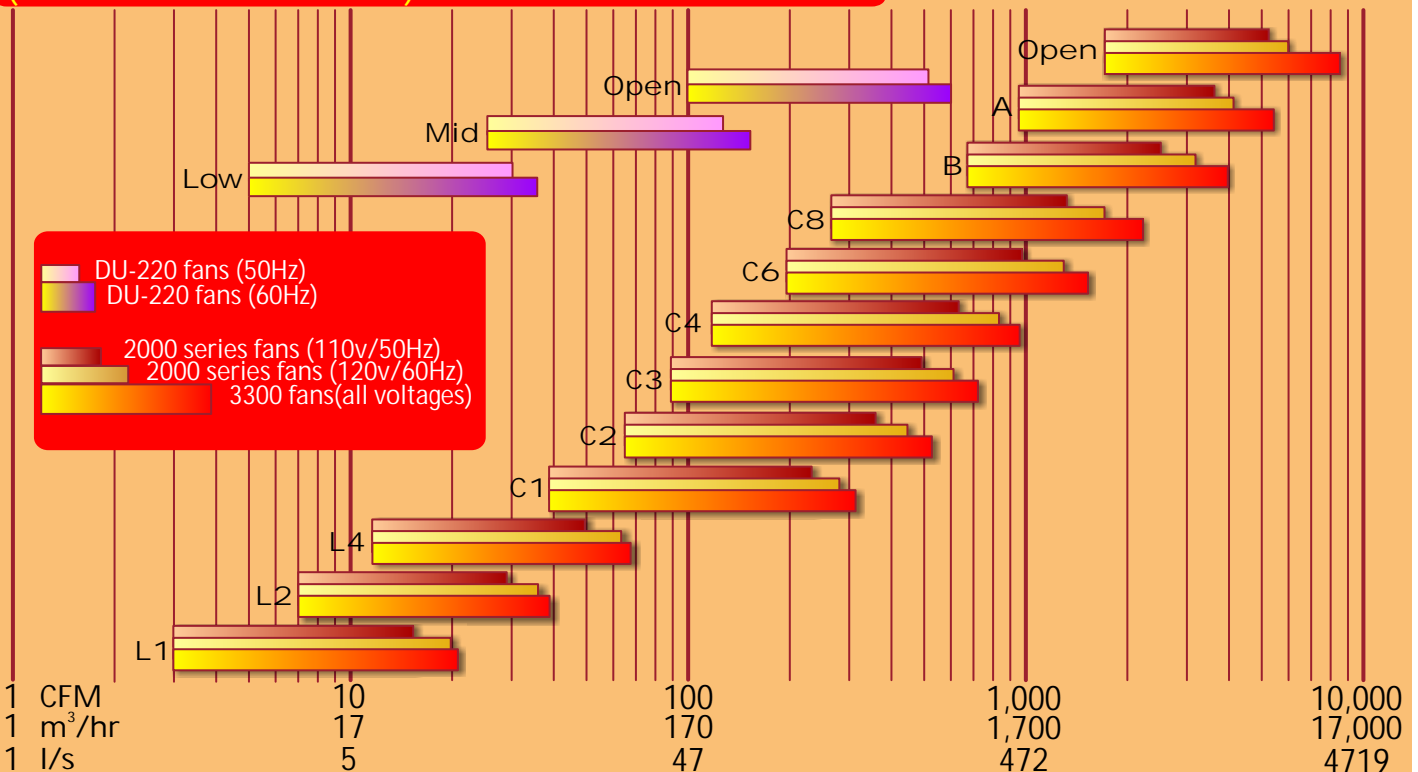


Low flow fan range plates



Standard range plates

Retrotec Fan Performance (Flow in CFM at 50 Pascals)



Each Range Configuration's wide span between the minimum\maximum flow, coupled with a huge number of ranges, enables faster tests over the widest range of buildings or enclosures.

Door Panels

Cloth door panel

Retrotec's least expensive choice for residential testing

*Options: Extension Kit enlarges the frame horizontally and/or vertically.
High pressure cloth for 300 Pa rain penetration testing.
Double fan cloth and upper cross bar to mount two fans.*



Dimensions		With Extension Kit
Door widths:	29.5 - 41.5 in (75 - 105.4 cm)	30 - 48 in (76 - 122 cm)
Door heights:	51.5 - 95 in (131 to 241 cm)	60 - 110 in (152 - 280 cm)
Frame thickness:	1.75 in (5.3 cm)	
Frame Case (included):	53 x 10 x 4 in (134 x 25 x 10 cm)	
Frame weight (with cloth):	14.2 lb (6.4 kg)	
Shipping weight:	20 lb (9 kg)	

Modular door panel

For rapid set up and a professional appearance, choose the modular door panels. Three light-weight panels expand to fit the widest doorways.

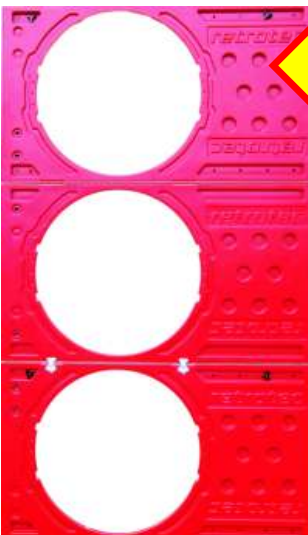
Options: Small X panel increases height to 97.5 inches (248cm).

Dimensions	
Door widths (min/max)	32 to 48.75 in (81 to 124 cm)
Door height	76.5 to 87 in (194 to 221 cm)
Panel case (included)	31 x 30 x 7 in (79 x 76 x 18 cm)
Panel set in case	24 lb (11 kg)
Shipping weight	31 lb (14 kg)

Three-fan folding panel

Choose this panel system, exclusive to Retrotec, for testing large open warehouses or stores.

Dimensions	
Door widths (max)	47 in (120 cm)
Door height	81 in (205 cm)
Panel case (included)	50 x 30.5 x 5 in (127 x 77.5 x 12.5 cm)
Panel set in case	26 lb (12 kg)
Shipping weight	31 lb (14 kg)



Door Fan Systems

Q46

Newest, most advanced house testing system
The Model Q46 system performs fully automatic testing using a laptop. Alternatively, simply key the desired test pressure and watch the DM-2 read air-changes or leakage per unit area in real time directly from the gauge; A unique Retrotec feature. The advanced regulated speed control circuit is less affected by wind.



Q5E

Add faster set up and more flexibility
The Model Q5E Infiltrometer system adds Retrotec's unique modular panel that not only looks professional but sets up quickly and allows for numerous testing configurations that the aluminum frame cannot match. Ideal for testing high rise buildings one floor at a time or for multi-family and commercial buildings.



Q4E

Larger buildings and faster testing
The Model Q4E system increases fan power from 0.75 hp to 2.0 hp. Test large houses and small commercial buildings with only ONE fan! Retrotec's exclusive fast, fully automatic control is so quick that it will track and nullify pressure fluctuations due to wind.



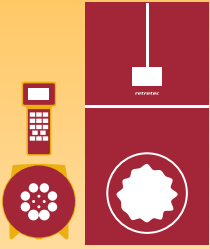
QMG

Largest buildings
The Model QMG system delivers a whopping 25,000 cfm to test large open warehouses or stores. This purpose built system has been used to test more large commercial buildings than all other systems combined. Use individual fans separately for smaller buildings.



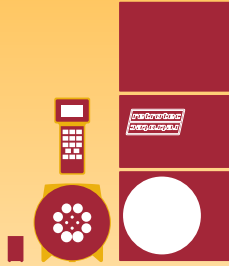
System Components

Q46



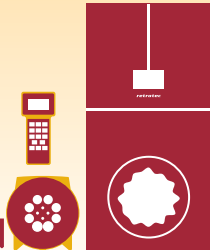
All cases included.

Q5E



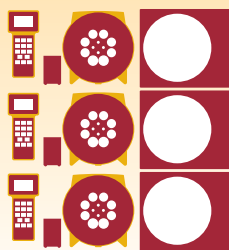
Picture shows fan case & optional tool case.

Q4E



Picture shows fan case & optional tool-case.

QMG



All cases included.

DucTester



The Model Q32 is specifically designed to accurately measure the leakage of any residential duct system. It works equally well in the pressurize or depressurize direction, and it can run a manual or fully automatic test to any set pressure, even zero.

Air Current Testers

With over 1000 puffs of smoke to highlight air leakage locations, these testers are invaluable. They produce thick smoke in small puffs to pinpoint leaks, and are the safest $TiCl_4$ testers available, since there are no chemicals to pour.



Retrotec Inc.

www.retrotec.com | sales@retrotec.com

| Sales: 855-RETROTEC (738-7683)

| Made in Everson, WA USA