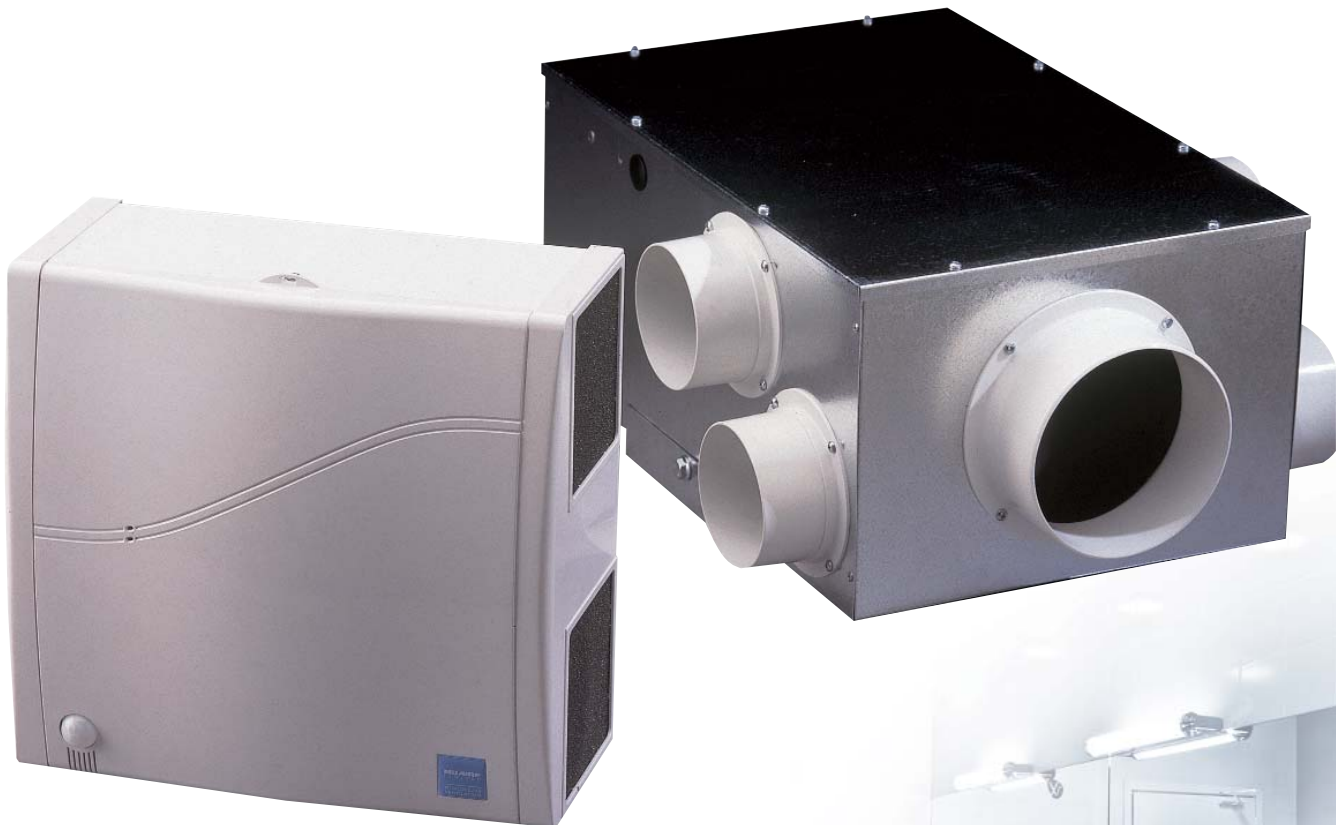


OPUS PLUS TWINFANS

COMPACT & POWERFUL, IDEAL FOR LARGER ROOM APPLICATIONS
WHILST MAINTAINING LOW NOISE LEVELS.



BENEFITS

COMPACT & POWERFUL

Small design, high performance up to 150l/s - ideal for larger room applications.

CONTINUOUS VENTILATION

Twin fans allow for automatic changeover to stand by fan in event of fan failure. They also feature auto duty share.

VERY QUIET OPERATION

Acoustically treated case and 'on board' speed control offers high performance with low noise levels.

SIMPLE COMMISSIONING

Both high and low speeds can be easily adjusted and set to the design requirements.

INCREASED LIFECYCLE

Fans automatically change over to standby every 12 hours of run time, increasing units overall lifecycle.

LOW MAINTENANCE COST

Easy clean filters protect motor and fan assembly, reducing maintenance costs and extending fan life.

HEALTHY ATMOSPHERE

Minimum fan speed can easily be adjusted between 0% and 50% for continuous background ventilation without wasting motor power. Enabling background ventilation to be provided.

CONTROLLABILITY

A choice of 'on-board' and 'remote' control options are available.

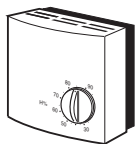
SPEED CONTROL INCLUDED

All units has speed control included as standard to provide a packaged solution.

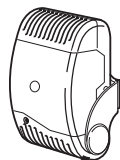
WARRANTY

Opus Plus have a 3 year warranty.

ANCILLARIES



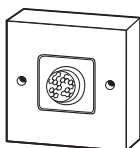
Humidistat.



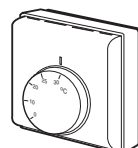
Audio visual fault indicator.



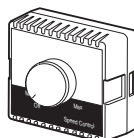
Wall kit.



Remote P.I.R. sensor.



Thermostat.



Remote speed control.

Easy maintenance.



Simple controls.



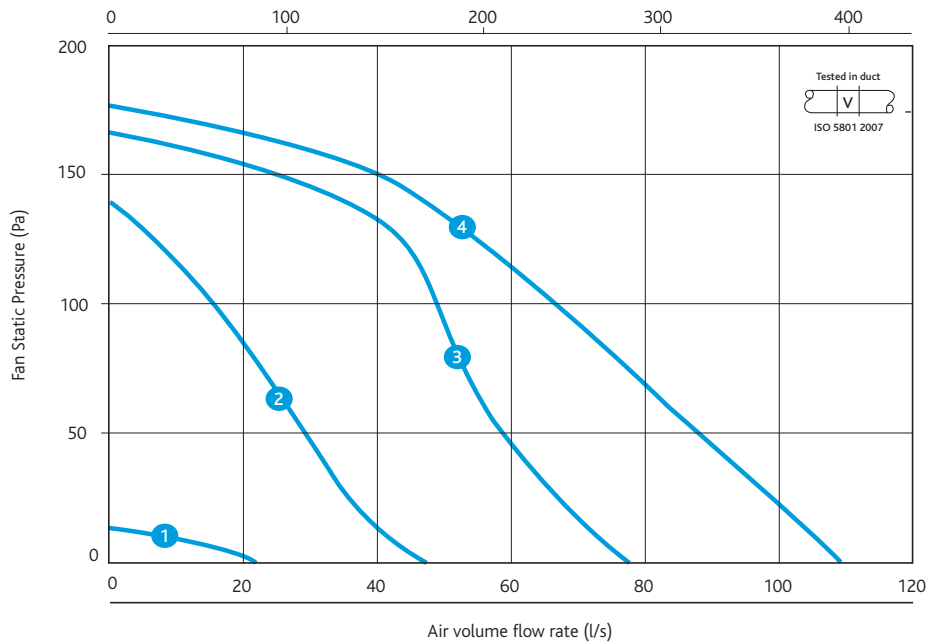
Easy filter access.



Knockout spigots.

PERFORMANCE - OPUS PLUS FANS

Opus 100 - Single and Twin Fans



Code Descriptions

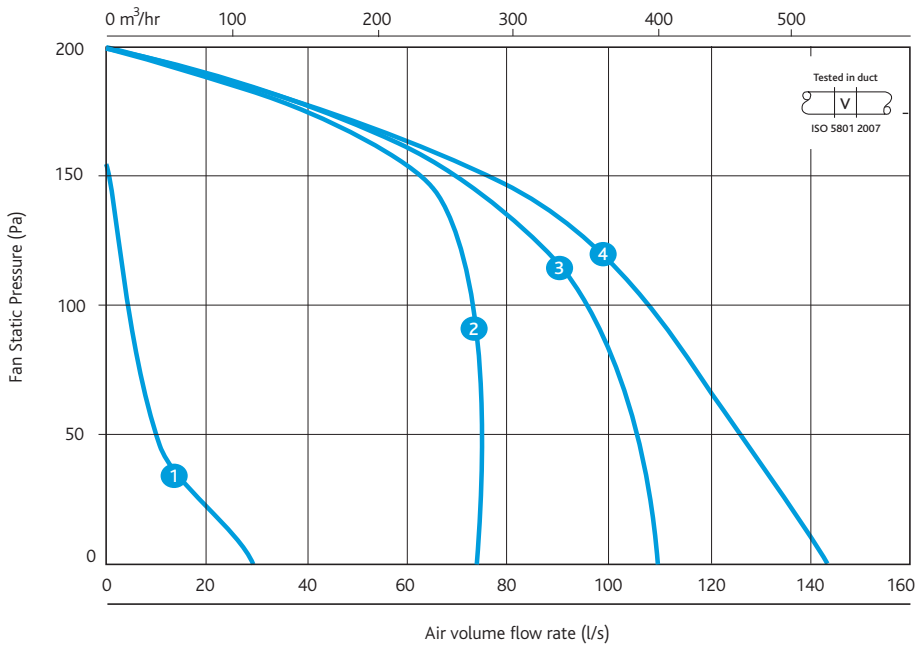
OPUS 100 - 2 B P

| | | | |

1 2 3 4 5

1. Opus-Plus range
2. Duty indication:
100 = 100 l/s
150 = 150 l/s
3. 2 = Twin fan
No reference = Single fan.
4. Unit application:
B = Surface mounted
M = Duct mounted
5. P = integral PIR. Option for surface mounted models only

Opus 150 - Dual Fans



Note: Speeds are 25-50% (1 & 2) 75-100% (3 & 4). Curves are for indication only.

Opus 150 - In event of fan failure, the second fan will continue to run. Performance will be as Opus 100.

PERFORMANCE - OPUS PLUS FANS

ELECTRICAL & SOUND

100B/2B Surface Mounted

Curve	Fan Code	Speed Control Setting	Input Power (watts)	FLC amps	Sound Power Levels (dB re 1pW)							
					Octave band mid frequency (Hz)							
					125	250	500	1K	2K	4K	8K	dBa @ 3m
1	OPUS100	25%	24	0.10	28	27	32	27	19	10	4	13
2	OPUS100	50%	36	0.15	43	42	48	42	34	25	20	28
3	OPUS100	75%	44	0.19	51	50	56	51	44	39	33	37
4	OPUS100	100%	100	0.39	59	59	62	58	54	48	45	45

150B Surface Mounted

1	OPUS150	25%	55	0.23	30	31	35	30	23	14	7	16
2	OPUS150	50%	65	0.27	45	47	51	46	38	30	25	31
3	OPUS150	75%	130	0.55	53	56	61	56	51	44	40	41
4	OPUS150	100%	200	0.78	57	61	65	61	57	51	47	48

100M/2M Surface Mounted

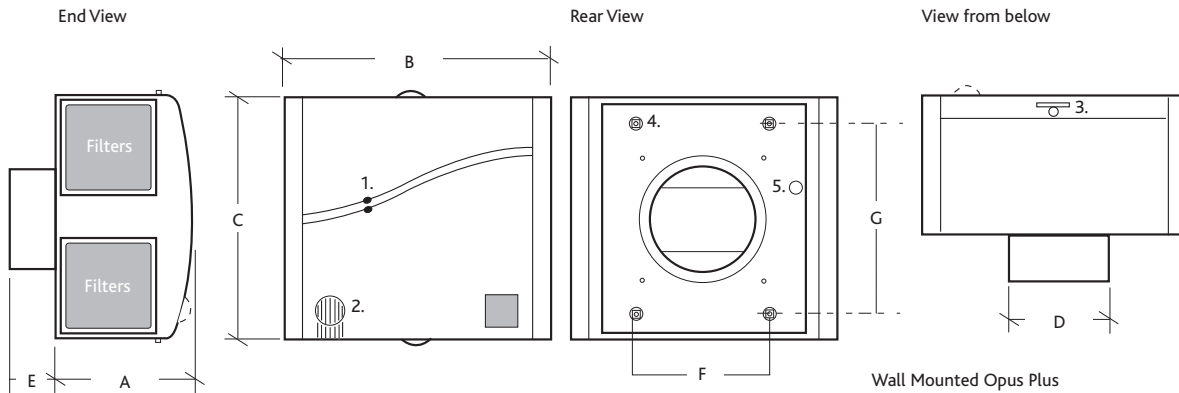
1	OPUS100	25%	24	0.10	30	24	20	18	12	1	-	4
2	OPUS100	50%	36	0.15	45	39	36	33	27	16	7	20
3	OPUS100	75%	46	0.19	53	47	44	42	37	30	20	30
4	OPUS100	100%	100	0.39	61	56	50	49	47	39	32	37

150M Duct Mounted

1	OPUS150	25%	55	0.23	31	27	22	18	13	2	-	4
2	OPUS150	50%	65	0.27	46	43	38	34	28	18	10	20
3	OPUS150	75%	130	0.55	54	52	48	44	41	32	25	30
4	OPUS150	100%	200	0.78	58	58	52	49	46	39	32	37

The electrical and sound information in the table is nominal. Breakout dBA@3m is spherical, free field.

DIMENSIONS - SURFACE MOUNTED OPUS PLUS UNITS

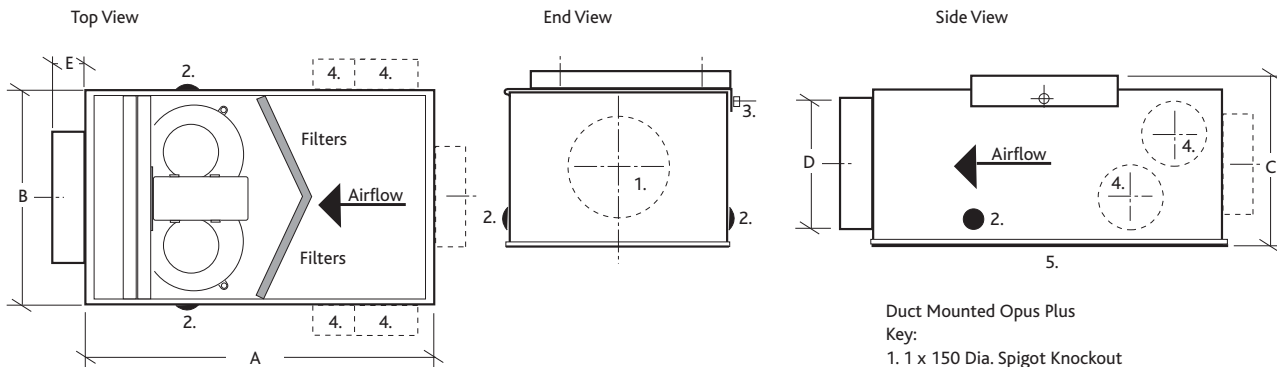


Wall Mounted Opus Plus

- Key:
- 1. LED Run and Fail Indicators
 - 2. Optional Fascia P.I.R.
 - 3. Cover Fixing Screws
 - 4. Fixing Points
 - 5. Cable Access

DIMENSIONS (mm) & WEIGHTS								
Fan Unit	A	B	C	D	E	F	G	Weight Kg
OPUS100-2B	160	335	320	125	50	160	248	5
OPUS100-B	160	335	320	125	50	160	248	5
OPUS150-B	160	335	320	125	50	160	248	5

DIMENSIONS - DUCT MOUNTED OPUS PLUS UNITS



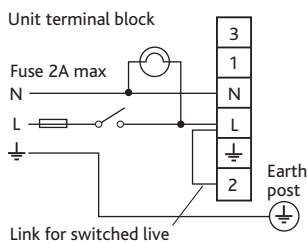
Duct Mounted Opus Plus

- Key:
- 1. 1 x 150 Dia. Spigot Knockout
 - 2. Cable Access
 - 3. Single Screw Unit Fixing
 - 4. 4 x 100 Dia. Spigot Knockouts
 - 5. Access Panel (full length of unit)

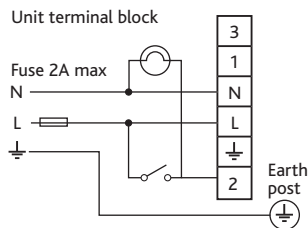
DIMENSIONS (mm) & WEIGHTS						
Fan Unit	A	B	C	D	E	Weight Kg
OPUS100-2M	500	330	260	200	50	11
OPUS150-M	500	330	260	200	50	11

WIRING

Wire for full speed operation only.



Wire for trickle vent/boost and timed overrun.



CONSULTANTS SPECIFICATION

OPERATION

The extract fans shall be as indicated on the drawings and shall be in accordance with the particular fan schedule in this specification. The vitiated air shall be extracted from each area via ductwork as shown. All necessary ductwork fittings and ancillaries shall be allowed for by the mechanical sub contractor.

The extract fans shall be operated as it receives signals from one of the interconnected sensors or an external signal e.g. light switch. The OPUS Plus shall have the facility to increase speed on a trickle and boost principle when triggered.

GENERAL FAN SPECIFICATION

The fans are acoustically lined with high density class "O" flame retardant acoustic insulation, giving extremely low noise levels and shall be complete with an integral filter, integral controls and fascia mounted run and fail indication. The breakout noise level and power requirements shall be in accordance with the schedule and the manufacturer's details.

The fans shall have low energy, high efficiency fan/motor assembly with sealed for life bearings.

OPUS PLUS

The unit shall be supplied complete with automatic fan changeover in the event of failure, sensed via a "hall effect" airflow sensor, and auto duty share every 12 hours of run time.

DUCT MOUNTED

The unit shall incorporate a low profile single point mounting bracket, incorporating a pre-stressed synthetic anti vibration seal. The bracket shall enable the unit to be mounted horizontally or vertically. The depth of the unit shall not be greater than 260mm. The unit shall be constructed with one removable panel allowing full maintenance access. To facilitate the interconnection of branch ducts the unit shall have 4x100 dia & 1x 125 dia knockouts on the suction side of the unit (spigots provided) and 1 x 200 dia discharge spigot.

Fan shall be the OPUS100- (2) M or the OPUS150-M as manufactured by Nuair.

SURFACE MOUNTED

All fan components are manufactured from ABS polymer and pre-coated steel. Unit finish shall be white.

Fan to have the option of an integrated PIR detector to switch the unit from trickle or off to full speed. Air inlet grilles are fitted with foam filters to protect the fan/motor assembly from airborne dust and contaminants. The unit shall have a 125dia spigot to connect to ductwork or wall mounting kit. Surface mounted LED indicators shall show the unit operational status.

The unit shall be supplied complete with automatic fan changeover in the event of failure, sensed via a "hall effect" airflow sensor, and auto duty share every 12 hours of run time.

All versions shall have the following functions integrally mounted within the fan unit on a purpose made PCB, all such components pre-wired and factory fitted by the manufacturer:

- Integral adjustable background ventilation control/set point (0 – 50%).
- Integral adjustable trickle ventilation control/set point (50 – 100%).
- Integral adjustable run on timer.
- Integral S/L terminal for boost trigger from remote switch, e.g. light switch.
- Volt free failure/status indication.
- 3 years manufacturers warranty.

The unit shall be controlled by one of the following remote options:

- OPUS –SPD – Low voltage (12V) speed control, ON/OFF and speed control between min and max settings.
- 230-PIR - (passive infra-red) movement detector (includes run-on-timer), 2-30 mins).
- 230-PIRNT - (passive infra-red) movement detector (without run-on-timer).
- HUMISEN - Humidity sensor.
- 230-TSTATR – Room thermostat.
- ES-AVI2 - Audio Visual Indicator.

Fan shall be the OPUS100- 2 B (P) or M or the OPUS150- B (P) or M as manufactured by Nuair Ltd.

The manufacturer's recommendations should be observed at all times.