

## Grant ap360 Air Purifier

### **Summary:**

The ap360 is a high-volume air purifier which uses HEPA-13 filtration and UV-C irradiation to remove dust, particulates, pollen, bacteria, viruses etc from indoor air.

The high-capacity, specially designed HEPA-13 filter removes 99.95% of particulates from incoming air. Post-filtration air is then passed over two powerful UV-C lamps which irradiate with a lethal dose of ultraviolet radiation. This disrupts RNA and DNA, inactivating any remaining living organisms. Clean air is then returned to the room.

The UV chamber is fully shielded from the external environment to give complete safety to the user. Interlock switches prevent accidental illumination of the lamps when the device is disassembled.

The powerful fan is electronically controlled so that the fan speed (and air flow) remains constant as the filter becomes gradually clogged over time. This avoids the reduction in performance seen with many filtration devices.

### **Servicing and repair:**

The UV lamps and filter cartridge have a service life of one year in normal use. These parts are replaceable, and the manufacturer can supply a replacement pack. Servicing should be carried out by the manufacturer's appointed agent or by a trained technician. Grant Instruments can provide training support to customers who wish to train their own technicians. If significant repair is necessary, the unit can be returned to the manufacturer under warranty.

### **Recommended coverage:**

Larger rooms may require more than one device. The air purification capacity of the device is 360m<sup>3</sup> per hour, therefore the number of recommended units per room is calculated simply: room volume (in cubic metres) multiplied by air changes required per hour, divided by 360m<sup>3</sup>, then rounded up to nearest integer.

<b>Specifications</b>	
Model number	ap360
Description	Air purification device
Height	1050 mm
Diameter	350 mm
Weight	13.4 kg
Shape	Cylindrical
Materials	Aluminium and plastic
Castors	5 (two lockable)
<b>Power</b>	
Power supply	220-230V, 50/60Hz a.c. Installation Class II
Power lead	2m, can be supplied with either UK, EU or Australian plug.
Power consumption	450 Watts

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Form Reference	QA-F-010-18	Version	1
Date	18/11/2020		

# Product Datasheet

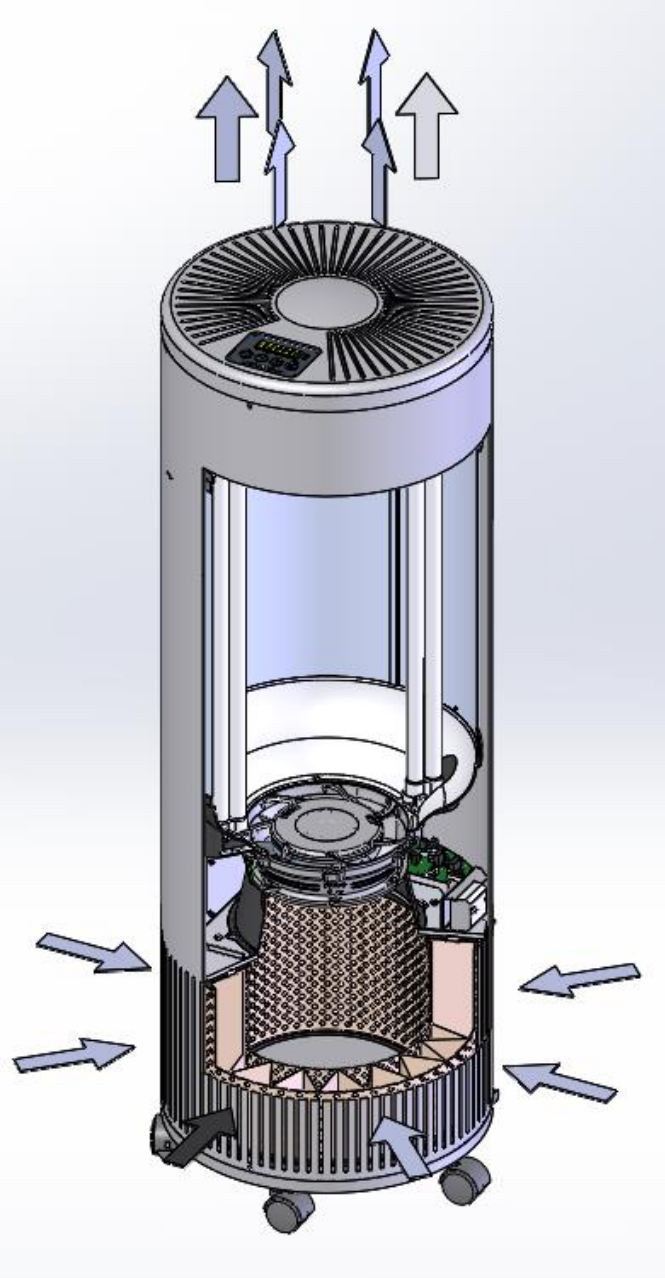
Safety features	Auto-off interlock switch prevents operation if unit is disassembled
<b>Operating conditions</b>	
Ambient Temperature	5 to 40°C
Maximum relative humidity	80% R.H. in room temperatures up to 31°C, decreasing linearly to 50 % R.H. at 40°C
Altitude above sea level	Up to 2,000 m (6,500 ft)
Operating Environment	Indoor use only
<b>Filtration</b>	
Filter type	HEPA-13, clinical grade
Efficiency	99.95% PM2.5
Service life	12 months under normal use
Customer replaceable	Yes, by a competent technician (professional service recommended).
Replacement part	Available from manufacturer
<b>Ultraviolet light</b>	
Lamp type	TUV PL-L 55 W Low pressure Mercury
Number of lamps	2
Lamp power	110 Watts (34 W UVC power)
Wavelength	253.7nm
Ozone emissions	None (coated glass)
Irradiance (internal min.)	300W/m <sup>2</sup> in treatment chamber
UV-C exposure outside device	Significantly less than limits set in ICNIRP and Optical Radiation Directive.
Service life	12 months under normal use
Customer replaceable	Yes, by a competent technician (professional service recommended)
Replacement part	Available from manufacturer
Safety features	Auto cut-out switches prevent accidental exposure. Internal light baffles prevent escape of UVC light through vents. Double wall design prevents UV leakage and protects internal electrical components from UV degradation
<b>Fan</b>	
Type	Powerful EBM diagonal flow fan rated for 1050 m <sup>3</sup> /hr
Capacity (air flow)	360 m <sup>3</sup> /hour max
Flow compensation	Electronic fan speed compensation adjusts for filter condition
Service life	At least 2 years under normal use
Warranty	Two years standard, extended warranty available
Speeds	4 including "background" mode and powerful "boost" mode
Control options	4 speeds, manual or automatic control with 7-day programmer and real-Time Clock. Status and service reminder function for filter and lamps. LCD screen, 3 rows x 16 characters

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Noise level	47 dB(A) at speed 1 increasing to 71 dB(A) at speed 4 ("boost" mode).
Warranty	2 years

**Schematic cutaway diagram showing airflow:**



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