### **Air purifers**



Performance book

## **Contents**

- 03 About us
- 04 360° smart filter
- 06 Air throughput
- 07 Energy efficiency
- 08 Quiet running
- 09 Certificates
- 10 Technical details

### About us

## Quality does not come from nowhere. It comes from IDEAL.

When it comes to the quality of our products, we leave nothing to chance. We have a policy of sustainability through tradition and conviction. For almost 70 years – and for many years to come.

### Ideal air everywhere.

#### Bring some clean air into your daily life.

Nothing is more important than breathing clean, fresh air. With the IDEAL AP PRO air purifier series, using the highest-quality materials and quality components, we are setting new benchmarks for air purification. Made in Germany.



### 360° smart filter

Our multi-stage filtration technology removes pollutants from your indoor air – including respirable and ultrafine particles (nanoparticles) that can make you sick.

IDEAL air purifiers use multi-layer filters to trap both small and large particles, as well as gases and molecules. Five layers make our filtration technology particularly effective – even when removing MPPS. This abbreviation stands for "Most Penetrating Particle Size" and refers to particles with a size of 0.1 to 0.3 micrometres. These particles are the most difficult to remove.



#### Layer by layer to clean air.

#### 1. Prefilter mesh

The prefilter mesh encompasses the 360° multi-layer filter and removes dirt and debris such as hair, fluff and dust.

#### 2. Prefilter layer

The prefilter filters out the coarse particulate matter and extends the service life of the HEPA filter.

#### 3. HEPA microfibre layer

The microfibre layer filters even respirable and ultrafine particles (PM2.5, PM0.3).

#### 4. Activated carbon layer

The activated carbon neutralises even chemical substances,  $NO_{2}$ , ozone and the strongest of odours.

#### 5. Cover layer

The cover fleece protects the high proportion of activated carbon.

#### 6. 360° filter

The  $360^{\circ}$  cartridge design guarantees effective utilisation of the entire filter surface, as well as a high air throughput.

	AP30 PRO	AP40 PRO	AP60 PRO	AP80 PRO	AP140 PRO
Activated carbon (g)	370	370	670	670	750
Activated carbon surface (sqm)	370000	370000	670000	670000	1125000
HEPA filter surface (sqm)	1.4	1.4	1.9	1.9	3.6

### Five layers for ultimate cleaning performance.

#### **AP30/40 PR0**

PM 10: 100 % PM 2.5: 99.98 % MPPS 0.3: 99.98 %



Filter media TFH 91-03: Cleaning performance measured at 100  $\text{m}^3\text{/h}$  as per DIN 71460-1 (AC Fine particle size 0.19–9.33  $\mu\text{m}$ )

#### **AP60/80 PRO**

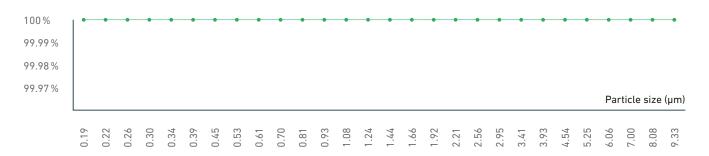
PM 10: 100 % PM 2.5: 99.97 % MPPS 0.3: 99.99 %



Filter media TFH 91-03: Cleaning performance measured at 124 m $^3$ /h as per DIN 71460-1 (AC Fine particle size 0.19–9.33  $\mu$ m)

#### **AP140 PR0**

PM 10: 100 % PM 2.5: 100 % MPPS 0.3: 100 %



# Air throughput

If you want to purify air, you need to move air – on as big a scale as possible. The IDEAL AP PRO air purifier series is designed for a high air throughput. In this way, the entire indoor air is moved through the air purifier's filter system as often as possible – depending on your individual requirements.

The IDEAL AP PRO air purifiers achieve this high air throughput through a number of clever design principles. Thanks to their large inlet and outlet openings, the air can be sucked in and blown out again virtually unimpeded. The airflow is only very slightly diverted inside the devices, which increases the airflow speed. The airflow can optimally and, above all, evenly pass through the 360° smart filter, which represents an obstacle for the airflow, thanks to its circular design. The powerful EC motors of the latest generation, which power the airflow itself, only add to this.

Air throughput (m³/h)	AP30 PRO	AP40 PRO	AP60 PRO	AP80 PRO	AP140 PRO
Night mode	50	50	60	80	140
Level 1	70	80	140	170	350
Level 2	150	200	250	400	650
Level 3	240	300	400	520	1000
Turbo	310	440	600	800	1500
Air throughput (cfm)					
Night mode	29	29	35	47	82
Level 1	41	47	82	100	206
Level 2	88	118	147	235	382
Level 3	141	176	235	306	588
Turbo	182	259	353	471	882
GBT 18801-2015 ratings					
CADR (m³/h)	300.7	433.3	561.1	675.3	n/a
CCM P rating (mg)	11400 (P3)	>12600 (P4)	>12450 (P4)	>12950 (P4)	n/a
CCM F rating (mg)	<1500 (F3)	>1500 (F4)	>1500 (F4)	>1500 (F4)	n/a

## **Energy efficiency**

With the AP PRO series, IDEAL is offering particularly energy-efficient air purifiers. Motors with innovative EC technology guarantee high performance at moderate energy consumption.

For optimum air purification, an air purifier should run 24 hours a day and seven days a week. But in doing so, conventional indoor air purifiers consume up to 550 kWh each year. The air purifiers of the AP PRO series, on the other hand, can be operated around the clock without hesitation, for example in automatic mode. This monitors the air quality and the device performance is adjusted in line with that quality.

### Example calculation for annual electricity costs

- 24/7 operation of the AP40 PR0 in automatic mode
- 365 days a year (8760 hours/year)
- 95% of that time at level 1 (at 5 W)
- 5% of that time at higher levels (at 10 W on average)

Energy costs of €13.81 per year (consumption of 46.1 KWh per year at €0.30 per KWh)

Energy efficiency (W)	AP30 PRO	AP40 PRO	AP60 PRO	AP80 PRO	AP140 PR0
Night mode	5	5	6	6	7
Level 1	7	8	10	12	14
Level 2	16	20	22	38	41
Level 3	25	30	60	75	95
Turbo	30	75	90	175	180
Turbo	30	75	90	175	

# **Quiet running**

The whisper quiet operation of the IDEAL AP PRO series is the result of a perfect interplay between the best available components.

There are several reasons for this: The fans fitted – comprising the EC motor and the fan blade – have a key influence on the quiet running of the AP PRO devices. The fan blades, which are produced in a single piece, excel thanks to their optimum aerodynamics. Alongside its extremely high energy efficiency and compactness, the GreenTech EC motor that is fitted also contributes to the ultra-quiet running.

All AP PRO models are equipped with these fans, which were developed specifically for IDEAL. The fact that the fan was constructed as a complete unit and the individual components are optimally matched to one another offers a decisive advantage here. This is also supported by the fact that all components inside the air purifier have been arranged for absolute airflow optimisation.

### Guide values for comparing noise levels

- Normal conversation (at a distance of 1 m): 65 dB
- Standard vacuum cleaner: 70 dB
- Normal office environment: 50 to 60 dB
- Bedroom at night: 35 to 40 dB  $\,$

Noise (dBA)	AP30 PRO	AP40 PRO	AP60 PRO	AP80 PRO	AP140 PR0
Night mode	16.7	16.7	16.5	18.7	25.2
Level 1	20.5	21.3	27.6	28.7	31.4
Level 2	34.8	37.4	35.9	47	44.7
Level 3	43.2	53	46.8	55.6	58.3
Turbo	54.2	61.7	56.6	63.4	66.5

## **Certificates**

The IDEAL AP PRO devices fulfil all basic requirements for electronic devices with regard to health, safety, function and the environment.















	AP30 PRO	AP40 PRO	AP60 PRO	AP80 PRO	AP140 PRO
GS	•	•	•	•	•
GBT	•	•	•	•	_
CQC	pending	pending	pending	pending	_
СВ	pending	pending	pending	pending	_
KC	pending	pending	•	•	_
ECARF	•	•	•	•	•
Hygiene	•	•	•	•	_

## **Technical details**

All technical details for our AP PRO models at a glance.





#### AP30 PRO

Dimensions (H x W x D):  $398 \, \text{mm} \times 255 \, \text{mm} \times 298 \, \text{mm}$ 

Weight: 3.6 kg

	Night mode	Level 1	Level 2	Level 3	Turbo
Air throughput (m³/h)	50	70	150	240	310
Air throughput (cfm)	29	35	44	73	176
Noise levels (dBA)	16.7	20.5	34.8	43.2	54.2
Energy efficiency (W)	5	6	7	9	30

#### **AP40 PRO**

Dimensions (H x W x D): 398 mm x 255 mm x 298 mm

Weight: 3.6 kg

	Night mode	Level 1	Level 2	Level 3	Turbo
Air throughput (m³/h)	50	80	200	300	440
Air throughput (cfm)	29	35	44	73	247
Noise levels (dBA)	16.7	21.3	27.6	53	61.7
Energy efficiency (W)	5	6	7	9	75

#### AP60 PRO

Dimensions (H x W x D): 668 mm x 468 mm x 257 mm

Weight: 15.0 kg

	Night mode	Level 1	Level 2	Level 3	Turbo
Air throughput (m³/h)	60	140	250	400	600
Air throughput (cfm)	23	73	105	176	353
Noise levels (dBA)	16.5	27.6	35.9	46.8	56.6
Energy efficiency (W)	6	9	12	23	90

#### AP80 PRO

Dimensions (H x W x D): 668 mm x 468 mm x 257 mm

Weight: 15.0 kg

	Night mode	Level 1	Level 2	Level 3	Turbo
Air throughput (m³/h)	80	170	400	520	800
Air throughput (cfm)	41	88	129	206	470
Noise levels (dBA)	18.7	28.7	47	55.6	63.4
Energy efficiency (W)	6	10	14	30	175

#### **AP140 PR0**

Dimensions (H x W x D): 725 mm x 562 mm x 633 mm

Weight: 51.0 kg

	Night mode	Level 1	Level 2	Level 3	Turbo
Air throughput (m³/h)	140	350	650	1000	1500
Air throughput (cfm)	174	235	323	412	824
Noise levels (dBA)	25.2	31.4	44.7	58.3	66.5
Energy efficiency (W)	7	13	21	40	180



