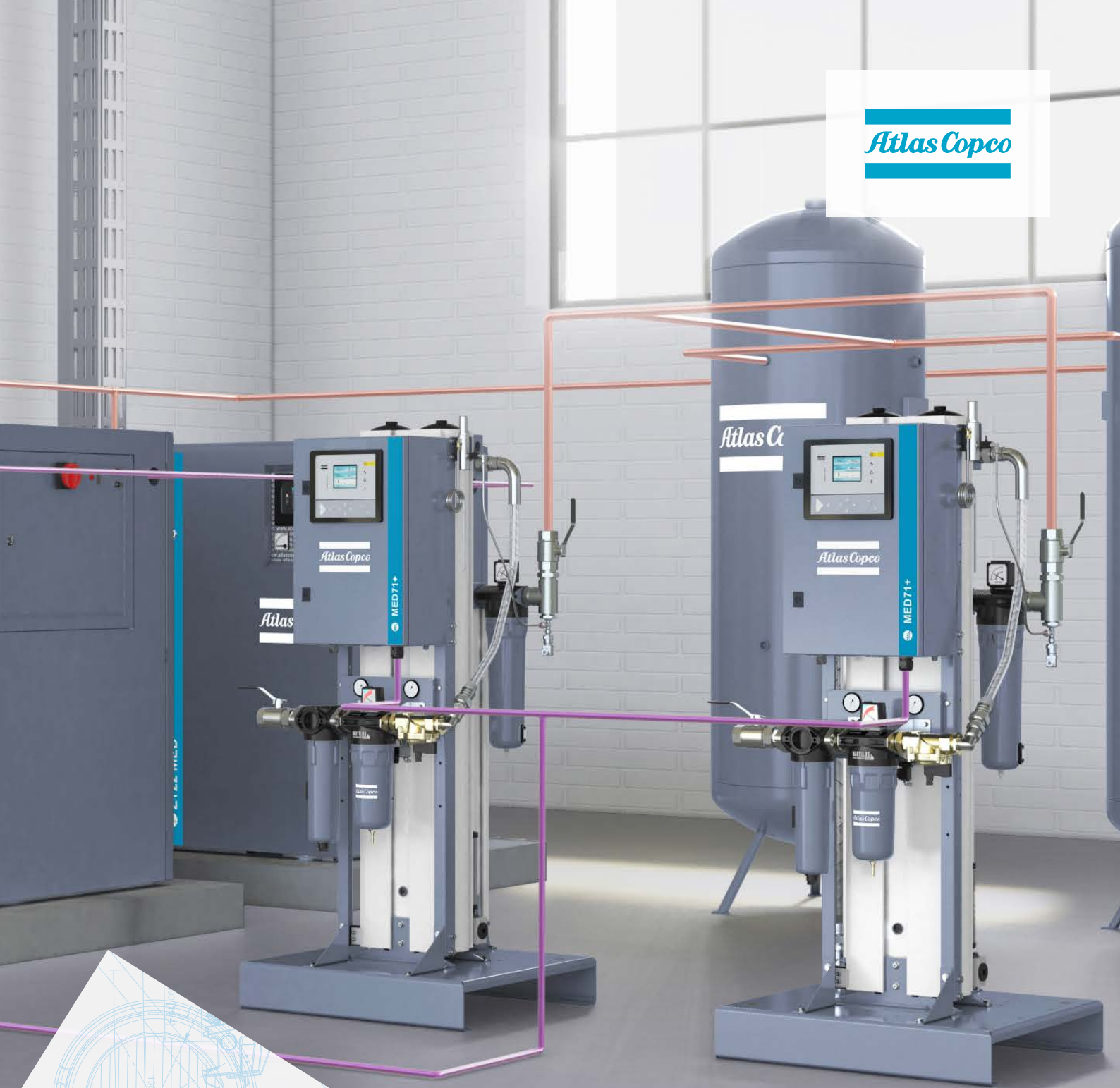


*Atlas Copco*



# Medical Air Purifier

MED12-142(+) Series



# Purity and precision in critical healthcare environments

The critical field of patient care requires ultra-clean and purified medical air delivered to operating theaters and hospital beds with absolute reliability. The Atlas Copco MED/MED+ series of Medical Air Purifiers offers unique multi-stage filtration that converts regular compressed air from any type of compressor into internationally certified medical air. These innovative devices provide clean air for all your medical and surgical applications.

## **Medical air applications:**

- Mechanical ventilation and anesthesia
- Drug delivery via a nebulizer
- Testing and drying of medical devices

## **Surgical air applications:**

- Pneumatic surgical tools  
(drilling, reaming, sawing, dissecting, tapping and screwing)
- Pneumatic ceiling pendant operation
- Testing of medical devices
- High-speed high torque motors



# 35%

## LESS FOOTPRINT



### Innovation

The medical air purifier is fitted with a patented purge nozzle design with multiple orifice sizes\*, enabling the purge rate to be adjusted to suit customer requirement, instead of delivering a set of fixed nozzles.



### Energy efficiency

The MED/MED+ series incorporates state-of-the-art energy management control with built-in purge control\* as standard (optionally on the MED series). The purge saver stops the purge flow when the dew point level remains low, leading to a more efficient use of energy.



### Unsurpassed Purity

Built to the most exacting standards, the MED/MED+ series is engineered to provide certified medical air even in areas with high ambient pollution. These air dryers ensure high air quality in 'worst case' but real-life pollution scenarios.

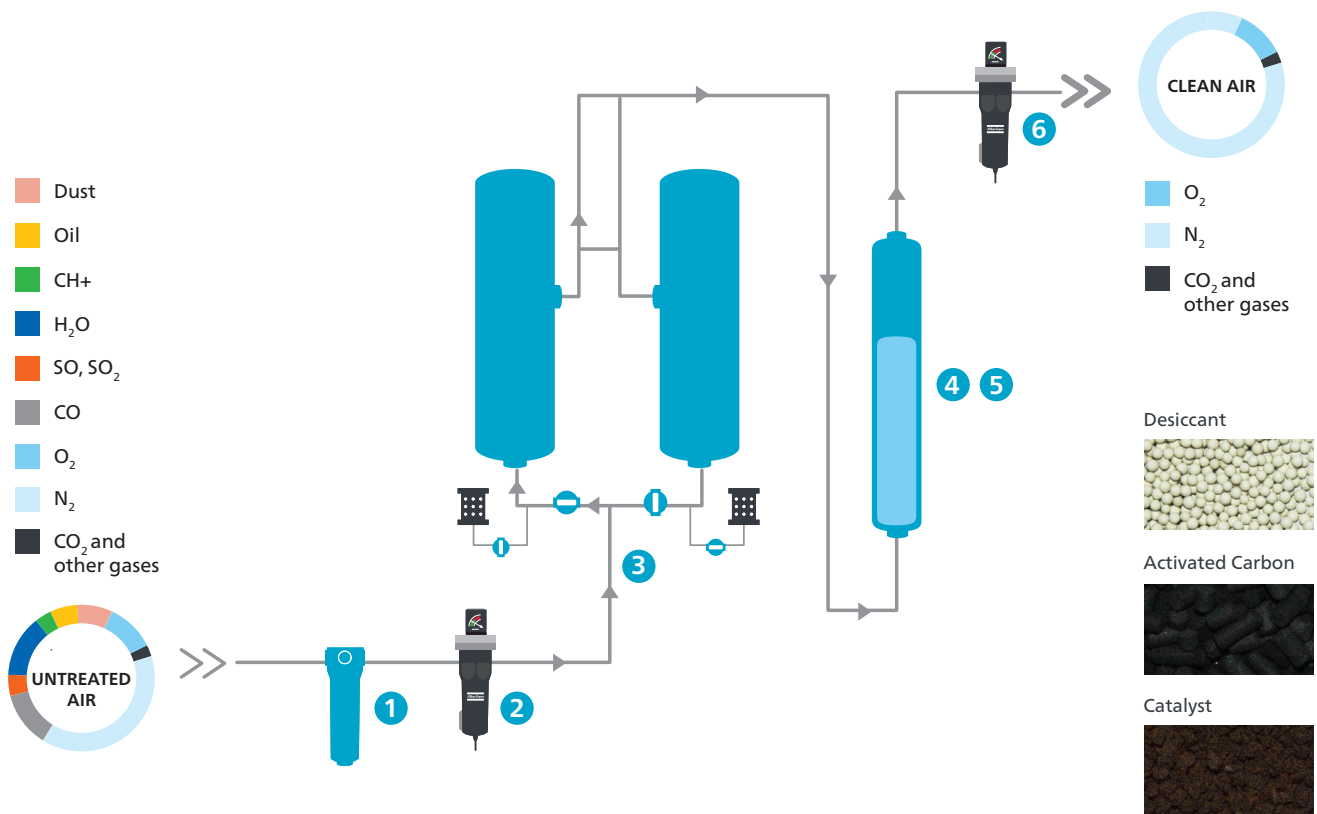


### Compact operation

Through clever component positioning, the MED/MED+ fits into any space or setting. It comes pre-assembled and ready for use, ensuring minimal installation time and cost.

\* The patented purge nozzle and purge control are not available on the MED12-17.

# 6 Steps of filtration



**1 2** A water separator for free water removal together with a fine and coarse coalescing filter, removes oil aerosol to less than 0.01 mg/m<sup>3</sup>.

**3** A heatless desiccant dryer reduces moisture content to a pressure dew point of -40°C/-40°F, removing any risk of condensation, bacteria and mold growth.

**4 5** A dual cleaning stage includes activated carbon to eliminate hydrocarbons (oil vapor, smells, etc.). A catalyst then converts CO into CO<sub>2</sub>.

**6** A bacterial filter at the exit removes bacteria and particles that may have been introduced in the desiccant stages with a count efficiency of 99.99%.



## Medically certified

Pre-certification simplifies organization and inspection by regulatory bodies, saving the hospital time and money. MED/ MED+ Medical Air purifiers surpass the requirements of the most demanding standards and regulations such as:

- Medical Device Directive MDD 93/42/EEC.
- EN ISO 7396-1 and ISO 14971.

Furthermore, they are designed and manufactured according to ISO 9001, ISO 14001 and the ISO 13485 quality management system.

## Pharmacopeia compliant

Built to exceed standards, MED/MED+ air purifiers provide certified medical air, even in situations with polluted intake air to ensure patient safety at all times. The six cleaning stages of the MED/MED+ have been carefully designed to make sure the air quality at the outlet is in compliance with the European Pharmacopeia monograph.

	European Pharmacopeia
O <sub>2</sub>	20.4% < x < 21.4%
CO <sub>2</sub>	<500 ppm
CO	<5 ppm
SO <sub>2</sub>	<1 ppm
NO <sub>x</sub>	<2 ppm
Water vapor	ADP -45°C (-49°F) / PDP -31°C (-23°F)
Oil vapor	<0.1 mg/m <sup>3</sup>
Dirt particles	not specified
Taste and odor	taste and odor free



# Choose the **best fit** for your requirement



## MED with basic controller

- Easy to use LED screen
- Microcontroller based design
- Dual voltage Device (115-230V)
- Alarm outputs to indicate solenoid faults, power faults and service intervals



## MED+ with advanced Elektronikon® controller

- 3,5" high definition display
- Standard purge control for up to 90% energy savings
- Alarms and warnings on PDP, net pressure and service
- Service warning indications for desiccant, catalyst, filters and water drains
- Pressure sensor on outlet for full control over the dryer's performance

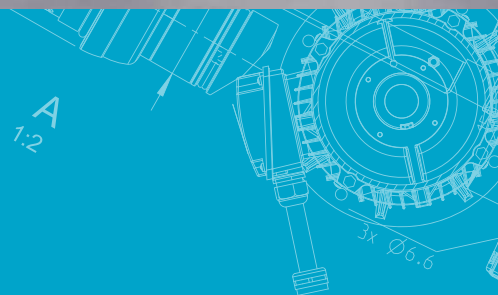
Option	MED	MED <sup>+</sup>
EWD on filters and water drain	O	O
Inlet solenoid for remote control	-	O
Canadian CSA Option Kit (incl. NPT connection)	O	O
QDT quality indicator	O	O
Catalyst (CO to CO <sub>2</sub> )	O	O
CO sensor	O	O
CO <sub>2</sub> sensor	O	O
O <sub>2</sub> sensor	O	O
Overflow protection (nozzle)	O	O
Gateway (Profibus, Modbus)	-	O

∴ Not available O: optional



# Total Solutions for **reliable** medical air

We supply the widest range of dedicated medical oil-injected and oil-free compressors. Combined with the compressors, the MED/MED+ Medical Air Purifiers can form pre-certified uAIR Medical Air Plants that comply to international regulations including Pharmacopeia and quality norms such as ISO 13485. Contact your local sales representative for more details on our complete Medical Air Plant offerings.



Maximum pressure: 11 bar(e)/160 psig for 7.5 bar and 10 bar units.

Type	Weight	Length	Width	Height	Connection
	kg	mm	mm	mm	
MED12 MED12+	77 106	450 700	550 800	1241 1580	½"
MED17 MED17+	87 116	450 700	550 800	1640	
MED21 MED21+	102 131	700	800	1217 1680	½"
MED35 MED35+	108 137			700	
MED42 MED42+	130 159	700	800		1585 1680
MED52 MED52+	184 213			700	800
MED71 MED71+	184 213	700	800		
MED104 MED104+	261 290			900	800
MED142 MED142+	309 338	900	800		

