

Air Treatment Unit

ULTRAMED

Industrial Hospital Compressed Air Systems



Air Treatment Unit ULTRAMED

Advantage

Low operational cost through ULTRAMED smart energy saving module;
Compact design for maximum space saving;
Existing Medical Air plants can be easily upgraded with no need for a new Electrical control panel;
Compatible with digital dew point indicator upgrade for Medical Air supplied to the Medical Air Pipeline continuous monitoring.

Application

“ULTRAMED” air treatment station with 6 stages of purification was specially designed by Ultra-Controllo for medical air grade production according with European Pharmacopeia requirements.

Ultra-Controllo medical air production plants meet EN ISO 7396-1, HTM and 93/42/EEC Directive requirements regarding medical devices. Air Quality complies with European Pharmacopeia
ULTRAMED DS features a smart energy saving module with dew point electronic monitoring automatically stopping column changeover whenever the ideal dew point is achieved.

As a result no more purge air is needed with a drastic reduction of electrical power consumption since the compressors work hours are reduced requiring less parts and labor for the entire plant.

Operating Mode / ULTRAMED's six purification stages:

1. High efficiency coalescing filter for water, oil and aerosols removal as well as particulate above 0.01 µ;
2. High efficiency activated carbon filter to remove oil vapor and odors reduces oil vapor and odors down to 0.003 mg/m³;
3. Two adsorption columns with high efficiency desiccant medium for water vapor removal as well as reducing carbon dioxide (CO₂), nitric oxide (NO) and sulfur dioxide (SO₂) levels to below the legal limits;
4. Catalyst filter reduces carbon monoxide (CO) by conversion into carbon dioxide (CO₂);
5. A final high efficiency dust filter captures any particulates carried over from the adsorption materials;

For medical air, Ultra-Controlo advises the addition of a sterile air filter to ensure that the supply of medical air is sterile

Receivers

Dewpoint dependent changeover for minimum purge air use;

Simple design;

Flowrate control for paralel operation with no further need of components change;

Corrosion resistant epoxi coating;

Continous outlet dewpoint monitoring through digital dew point indicator, not included;

Visual color change indicator for disecant replacement;

Low dewpoint indicator alarm;

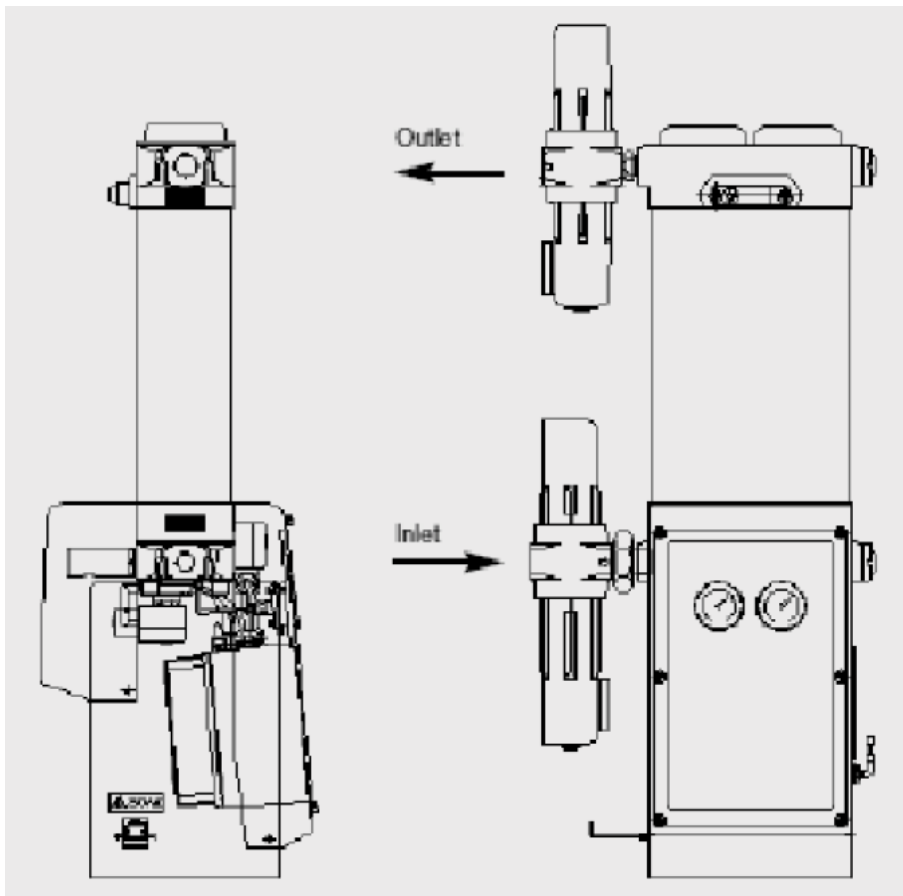
Designed for working pressures up to 16 bar.

Technical Specifications

TYPE	CODE	CAPACITY	DIMENSION	WEIGHT
		m ³ /h	W x H x D em mm	kg
ULTRAMED 10	206202A010	40.0	364 x 1045 x 302	38
ULTRAMED 11	206202A011	53.0	387 x 1211 x 302	43
ULTRAMED 12	206202A012	70.0	387 x 1376 x 302	48
ULTRAMED 13	206202A013	90.0	387 x 1541 x 302	53
ULTRAMED 14	206202A014	110.0	419 x 1707 x 302	58
ULTRAMED 15	206202A015	144.0	732 x 1960 x 447	74
ULTRAMED 16	206202A016	179.0	400 x 1680 x 1200	217
ULTRAMED 17	206202A017	220.0	400 x 1846 x 1200	230
ULTRAMED 18	206202A018	288.0	745 x 2076 x 1200	285

1) related to air at STP / measured at 7 bar and 35°C inlet temperature

Technical Images



Air quality	
Water point	-40°C pressure dew point
	-56°C atmosph. dew point
Oil	<0.01 mg/m ³
CO ₂	300 ppm
CO	5 ppm
NO/NO ₂	2 ppm
SO ₂	1 ppm
Operating pressure	max. 16

