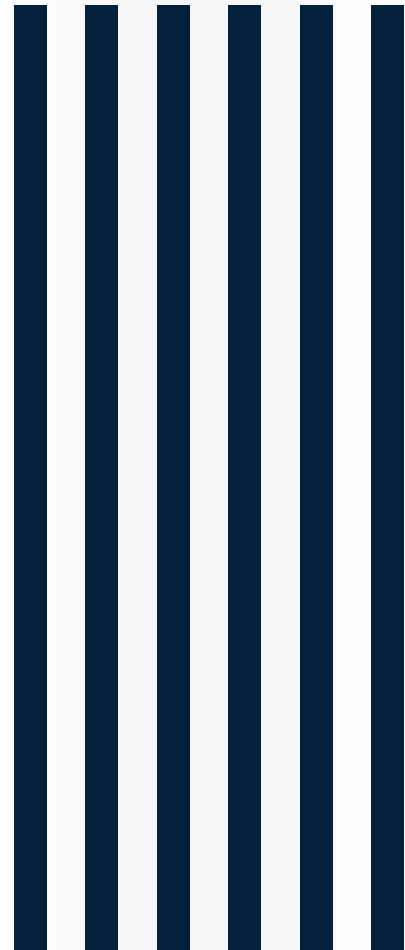# TEKNOMAR®

SAHARAN ASEPTIZER
XRETON-P CW 5000/10000

Saharan Type Mobile
Air Conditioning and Air Sterilization Device
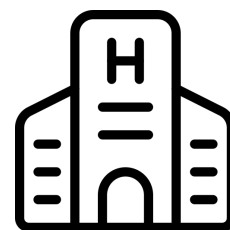
Atmospheric Plasma Technology

SAHARAN ASEPTIZER

It's a microbiological protection and contamination reduction, high-level particle cleaning, air conditioning device in airborne bacteria-virus sterilization.

Provides positive-negative air pressure and air-conditioning of the environment.

FIELD OF USAGE

- Field Hospitals

- Tent Type Field Hospitals

- Mobile-Trailer Type Field Hospitals

- Container Type Field Hospitals

- Hospitals for Disaster Area

- Shed Type Hospitals etc.

Specially produced for field type and mobile hospitals. It can also be used as a stand-alone air conditioning device. Minimizes the risk of possible epidemic and contamination in the environment where it is located. Provides **a Maximum Level of Air Sterilization.**

Saharan Aseptizer is used safely in all kinds of mobile and/or fixed field type hospitals and in all units of these hospitals where high hygiene and air-conditioning are needed, such as;

◎ Isolation Room

◎ Laboratory Unit

◎ Radiology Unit

◎ Intensive Care Unit

◎ Burn Treatments Room

◎ Emergency Unit

◎ Service Unit

◎ Mobile Dialysis Unit

◎ Triage Unit

◎ Operating Room Unit

◎ Blood Bank Unit

◎ Decontamination Room-Area etc.

- Controls the heat, humidity, pressure and particle in the environment where it is used.

- Has 5 different modes; 3 positive, 1 negative and 1 automatic.

- It is capable of providing POSITIVE and NEGATIVE pressure and has a decontamination system.

- Adjusts the air speed flow according to the filter efficiency with the speed compensation system.

- The man filter is HEPA H14.
  (99,999% retention for particles larger than 0.3 - 0.5 micron)

- Cleans the air taken and expelled from the external environment by using pre and waste filter application. (Eu4, Eu7, G4 Carbon)

- Ensures filter safety with its leak-proof HEPA Plenum Box in accordance with DOP. The system has UVC 254 nm germicidal lamps.

- With the use of Saharan aseptizers, the risk of possible contamination and epidemics is minimized.

■ With UVION Module technology, it is provided to disinfect the filtered air with negative ion and atmospheric plasma effect.

■ Values can be set via touch, color, graphic display and area variables can be observed.

■ Has full automatic automation control and the sensor group is sensitive to sensitive changes.

■ At maximum power, the measured volume is 55 Db.

■ Installation time is short, easy to use and most importantly, it can feed 4 separate units at the same time.

■ With its mobile design, the device works in all out weather conditions without the need for a special external area.

■ The chassis of the Saharan Aseptizer device is especially made of steel and does not oxidize due to negative ions.

SAHARAN ASEPTIZER

Comprises a complete sterilization and negative ion generator, which can operate as a stand-alone system. System creates atmospheric plasma (pathogen ionizer). The negative ion generator consists of Titanium dioxide (TiO_2), Silver iodide (AgI), Copper Sulphate (CuS) coated borosilicate, cylindrical glass tube and HV unit. This mechanism, thanks to its catalytic inverter ethylene-based gas and the particles in the system-OH (hydroxyl attachments) breaks down to anaesthesia and other gases to decomposition, microorganisms DNA structure in violation of the deactivation, negative (-) Ions means of the suspended particles and to the right in the photocatalytic reaction by forming the airborne pathogens and gases ineffective. Destroys all kinds of microorganisms, bacteria, viruses, pathogens.
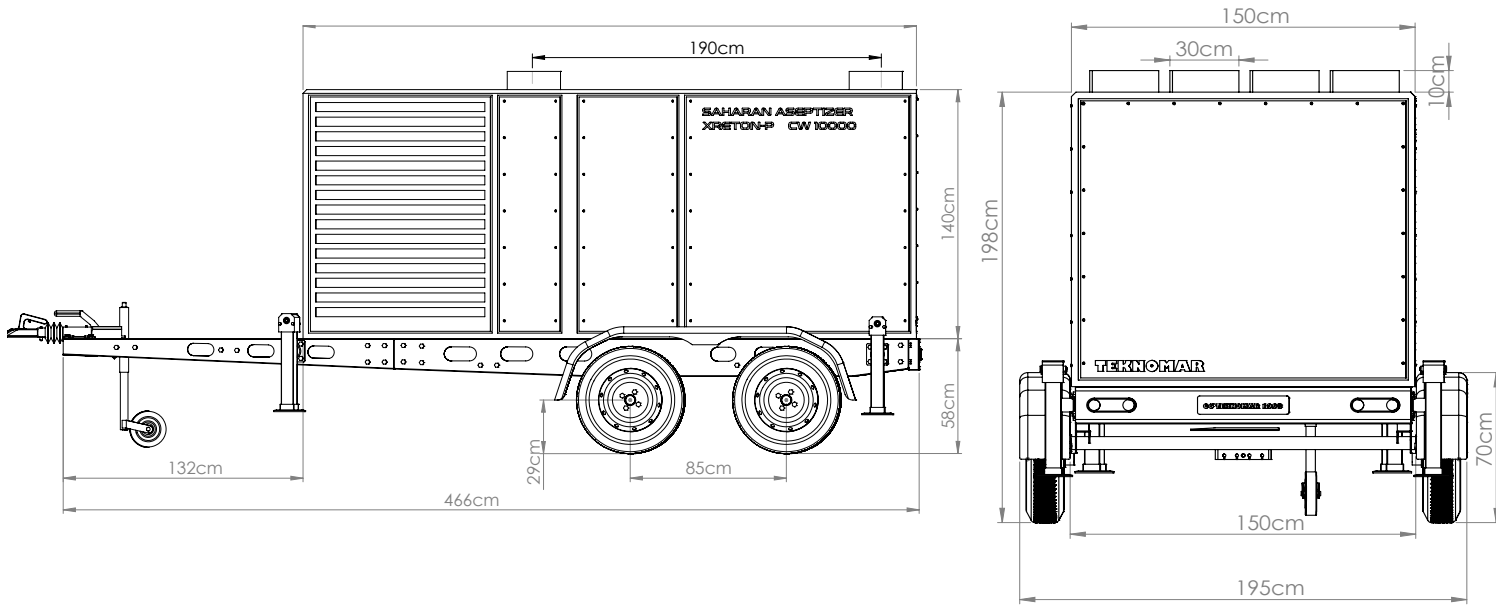
UVION MODULE TECHNOLOGY

Fresh air is taken from the outside to the Saharan Aseptizer device, thus it is possible to obtain adjustable air in the range of 10% - 100%. If this feature is used, 20 Pa positive pressure is provided in the indoor environment where the device is used.

CLEAN AIR INPUT

TECHNICAL SPECIFICATIONS & DATASHEET

MODEL	CW5000	CW 10000
TYPE	Saharan Type Compact Mobile High-Level Industrial Hygienic Particle Reduction and Air Conditioning Device	
CLASS	MODULE A – Class I	

TECHNICAL SPECIFICATIONS		
EXTERIOR DIMENSIONS (W-D-H) (cm)	334 x 150 x 140	
MOBILIZED COMPACT DIMENSIONS (W-D-H) (cm)	466 x 195 x 208	
DEVICE WEIGHT (kg)	1300	1520
OPERATING MODE	NEGATIVE / POSITIVE	
HEATING AND COOLING CAPACITY (Btu)	62000 / 56000	124000 / 112000
EXTERNAL HEATING CAPACITY (kW)	3,3	3,3
AIR CONDITIONING POWER CONSUMPTION (W) Cooling / Heating	5730/6590	11460/13180
FILTRATION POWER CONSUMPTION(W)	1100	2200
BLOWING INLET SIZE Ø mm / Piece	295 / 4	295 / 4
SUCTION INLET SIZE Ø mm / Piece	295 / 4	295 / 4
FRESH AIR INTRODUCTION CAPACITY (m³/h)	0 - 5000	0 - 10000
INTERNAL AIR CAPACITY	0 – 5000	0 - 10000
TOTAL AIR CHANGE CAPACITY(m³/h)	h 3 - 4 m X 140-150 m² area 15 Cycle	15 Cycle h 3 - 4 m X 280-300 m² area
EFFICACY AREA AT CLASS 10.000	h 3 - 4 m X 140-150 m² area	h 3 - 4 m X 280-300 m² area
EFFICACY AREA AT CLASS 100.000	h 3 - 4 m X 180-190 m² area	h 3 - 4 m X 330-350 m² area

PROGRAMS	3 Positive, 1 Negative, 1 Auto Total 5 Programs
PARTICULER DECONTAMINATION	95% - 96% particulate decontamination for particles as large as 0.3 - 0.5 µm within the first 1 hour
BIO DECONTAMINATION	96% ≤ bio-decontamination within the first 1 hour
BIO DECONTAMINATION EFFICACY	Unfilterable Resistant Long Ethylene Agents, All Kinds of Microorganisms, Viruses, Influenza, RSV Pathogens, Mold, Fungus, Covid, etc.
HEPA RETENTION RATE	Filtration Efficacy at 0.3 – 0.5 Micrometer Particle Size
HEPA PERFORMANCE	99,999%
H14 HEPA MAIN FILTER SIZE (mm)	610 x 1220 x 220 / 250 Pa
F7 RIGIT FILTER SIZE (mm)	490 x 592 x 149 / 170 Pa
CARBON FIBER PRE FILTER SIZE (mm)	Carbon / Fiber / 50 Pa
AMBIENT AIR - CONDITIONING	16-30 ^{0}C
DEVICE CHASSIS	Electrostatic Powder Coated Steel
SOUND VOLUME (1 m)	55 dB
AIR BLOWING METHOD	With Flexible Pipe
AIR SUCTION METHOD	With Flexible Pipe
ELECTRICAL INFORMATION	380-400 V AC 50-60 Hz
PROTECTION CLASS	IP20 / EN 60601-1-2:2016
SCREEN	4.3" LCD Touch Screen
CONTROL SYSTEM	The Unit Controls Continuously The Environment Temperature, Pressure, Air Humidity, Filtration Clogging and Air Speed With 1% Precision.
SOFTWARE	PLC / HMI
MENU LANGUAGE	TR / ENG
ALARM WARNING	Error Conditions, With Alarm Codes Audible and Visual Warning
PASSWORD PROTECTION	User and Technical Service Password
AIR SPEED SENSOR	1% m/s Sensitivity, 4-20 mA
MARGIN PRESSURE SENSOR	40-450 Pa
HEAT & HUMIDITY SENSOR	1% ^{0}C, 1% Rh Sensitivity, 4-20 mA Rod Type
AIR CONDITIONING INTERNAL UNIT	High-Performance A1 Class Inverter Heating Cooling Unit
ENERGY LABEL COOLING/ HEATING	A++ / A+++ 60% ≤ Energy-saving
AIR CONDITIONING EXTERNAL UNIT	Air Conditioning External Unit Operating Temperature -10 +44 ^{0}C
MOISTENING	External Ultrasonic Nebulizer (Optional)
FRESH AIR SUCTION FILTER	EU7 FILTER
AMBIENT AIR SUCTION FILTER	G4 CARBON FILTER
UVION MODULE	Atmospheric Plasma / Negative Ion Generator
ION GENERATOR	TiO2, AgI, CuS coated cylindrical borosilicate glass tube ion generator
ATMOSPHERIC PLASMA	HV (5000 V plasma) supply
UV LAMP	8 units 15W UVC 254 nm germicidal lamp
SPEED COMPENSATION SYSTEM	Automatic Air Speed Flow Adjusted According to Filter Clogging
SEALING	Provides filter safety with a leak-proof HEPA Plenium Box suitable with DOP test.
PLENIUM BOX FILTER RESISTANCE	425 Pa

DOCUMENTS	
ISO 9001	Yes
ISO 13485	Yes
EC CERTIFICATE	Yes
DOMESTIC GOODS CERTIFICATE	Yes
CERTIFICATE of FREE SALE (CFS)	Yes
USABILITY TEST APPROVAL	Yes
TSE (TURKISH STANDARDS INSTITUTION) SERVICE CERTIFICATE	TS 12850 and TS 12426 Service Adequacy Certificate

OTHER AND OPTIONAL SPECIFICATIONS	
INSTALLATION and CABLE	All installation and cables used in the device are Halogen Free. (Non- inflammable).
CAPACITY	Air, Heating Capacity can be increased by 40%.
HEATING GROUP	Heater and Dehumidifier Thermostat Stepped Resistance Group can be increased up to 10 KiloWatts.
FANS (Internal and External)	Static/Dynamic, Stainless, Frequency Controlled and Mode Calibrated Radial, EC, Plug, etc. FANS (650 Pa) can be connected coupled.
SEALING	Leak-proof gasket and lock on the device covers.
ISOLATION	Acoustic and heat insulation 20-25 mm fireproof polyurethane material (plate and pyramid). (20-45 kg / m^3)
COMMUNICATION	RS 232, I /O
OPTIONAL COMMUNICATION	Ethernet, Wi-Fi, Rf-ID
ELECTRIC	According to the countries, 220/240 V 50-60 Hz, 110 / 120 V 50-60 Hz, Three phase 380 / 400 / 440 V 50-60 Hz (against +-10% fluctuations)
SENSORS	Air flow speed, pressure sensor, temperature control, humidity sensor, thermostat, frequency control, phase control, static occupancy, defrost sensors.

MAINTENANCE PERIOD AND KIT			
	MAINTENANCE PERIOD	CW 5000	CW 10000
H14 – HEPA PRE - FILTER	1 time in 6 months	1 Piece	2 Piece
F7 RIGIT FILTER	2 times in 6 months	2 Piece	4 Piece
CARBON FIBER PRE FILTER	2 times in 6 months	1 Set	2 Set
UV LAMP	1 time in 6 months	8 Units	8 Units
UVION PATHOGEN IONIZER UNIT	2 times in 1 year	2 Set	2 Set
SOFTWARE VALIDATION	1 time in 1 year	Once	Once

This maintenance period and maintenance kit are provided for normal operating conditions. It may change according to adverse working conditions.

Our Aseptizer Device has been tested and APPROVED with the number 80962070 by the T.R. Ministry of Health, Public Health Institution of Turkey Microbiology Reference Laboratories Presidency.

We Produce
for your health