



VERAGON™ V10 AIO

VERAGON'S V10 'ALL-IN-ONE' (AIO) HARNESSSES HUMIDITY IN THE NATURAL AIR TO PRODUCE HIGH-QUALITY, MINERALISED DRINKING WATER, AT A LOWER COST THAN CONVENTIONAL BOTTLED SUPPLIES, WITH MINIMAL ENVIRONMENTAL IMPACT.



Like all Veragon products, the V10 AIO™ (All-in-One) has been used in the field by some of the world's most demanding commercial operators. Veragon's technology has been tried, tested and successfully deployed on operations by both the UN World Food Programme and NATO.

The V10 AIO 'Air to Water' Generator (AWG) initially draws the humid air through a filtration system before it enters the condensation chamber. This filtered air then makes contact with cold plates which cool the air to its dew point. This induces condensation of the water vapour in the air, changing it from gas to liquid. The condensed water is collected in the storage tank. The water is then

purified using ozone, or alternatively chlorine, in order to oxidise and inactivate organic and chemical impurities, as well as any bacteria present in the water.

The sanitised water is then mechanically filtered, removing unpleasant odours and tastes. The sanitised and filtered water is then mineralised via special mineralising cartridges, or, optionally, via the micro-dosage and dilution of hyper-concentrated mineral salts.

Before delivery, the water is finally cooled by a chiller which makes it pleasantly cool to drink. To avoid contamination from the tap, the last stage of treatment is the irradiation

of ultraviolet rays. The quality of the water meets standard potability requirements. Dedicated probes constantly monitor the quality of the water.

Veragon's V10 AIO produces up to 1,000 litres of water a day, under optimal conditions. This provides a viable alternative solution to wells or to other water supply systems, such as bottled water, reverse osmosis or desalination.

The V10 AIO also contains a fresh water treatment unit (V300WT-FW-T) with the ability to treat up to 300 litres of water per hour from an existing source. This allows the use of otherwise undrinkable water.

AIR TO WATER - THE PROCESS



TRIED AND TRUSTED BY THE WORLD'S LEADING OPERATORS

V10 AIO™ TECHNICAL FEATURES

WATER PRODUCTION	Up to 1,000 litres/day (approx. 40 litres/hour)
WORKING CONDITIONS	T = 17-45 °C / RH = 20-100%
UNIT FRAME	Stainless steel AISI 304
TANK	PE 900 L - polyethylene for drinking water
SIZE / WEIGHT	H 177 cm x W 190 cm x L 219 cm / 1,000 kg
PURIFICATION	UV / ozone or chlorine
REFRIGERATING GAS (AIR TREATMENT)	R-410C
ELECTRICAL SUPPLY	380 V - 50 Hz / 5 pin plug (three-phase + neutral)
REQUIRED ELECTRICAL POWER SOURCE	30.0 kW
POWER CONSUMPTION	Approx. 8.0 kW (tropicalised type) / Approx. 10.0 kW (standard type)
NOISE	Approx. 64 dB
WATER CHILLER CAPABILITY	ΔT = 20 ° (up to external T = 50 °C)
WATER QUALITY	Certified drinking water
COMPLIANCE WITH WATER STANDARD	World Health Organization, Food and Agriculture Organization of the United Nations (Rome 2007 - D.L. 2001 n. 31 Italy)
CERTIFICATION	ISO9001:2008 / CE / DM174
COLOUR	Military Green / Sand / Grey / White

V10 AIO™ MODELS

TYPE*	PURIFICATION	VERSION	CODE	BASIC EQUIPMENT
STANDARD (S) TROPICALISED (T)	CHLORINE (C) OZONE (O)	BASIC SPEC (B)	V10AIO-S-C-B V10AIO-T-C-B	Electromechanical operation, water quality monitor, hydraulic pipes and fittings in stainless steel, air filter, activated carbon block filter, mineralisation cartridges, water chiller, hydraulic and electric preparation for packaging machine, fresh water purification system V300WT-WF-T.
		TOP SPEC (T)	V10AIO-S-C-T V10AIO-T-C-T	Electromechanical, water quality monitor, hydraulic pipes and fittings in stainless steel, air filter, activated carbon block filter, mineralisation cartridges, water chiller, PLC control panel, display for alarm and vital function, hydraulic and electric preparation for packaging machine, fresh water purification system V300WT-WF-T.

*STANDARD: T ≤ 35 °C, RH ≤ 70% TROPICALISED: T > 35 °C, RH > 70%

V10 AIO™ RECOMMENDED OPTIONAL FEATURES

OPTIONAL FEATURE	DESCRIPTION	CODE
MICRO-DOSAGE MINERALISATION SYSTEM	The Micro-Dosage Mineralisation System (MMS) automatically checks the micro-dosage and dilution of the solution of hyper-concentrated salts, allowing the production of water with the desired mineral content.	MMS
BIOFILM PROBE	Microorganisms (pathogenic and not) may generate an organic film on the inner walls of the hydraulic circuits. The Biofilm Probe (BP) constantly monitors the state of such biofilms and the consequent change of the biocide. <i>If the machine is in a highly polluted area (e.g. industrial site), option may be deemed necessary following water testing. (Option only applicable if the units are equipped with a PLC).</i>	BP
HEAVY METAL FILTRATION SYSTEM	The Heavy Metal Filtration System (MF) ensures separation of any heavy metals from the generated water. The product is certified WRAS - DVGW for drinking water. <i>If the machine is in a highly polluted area (e.g. industrial site), option may be deemed necessary following water testing.</i>	MF
HUMAN MACHINE INTERFACE	The Human Machine Interface (HMI) enables remote control of the main functions of the generator and the treatment process via software connecting to the PLC control panel (10" colour touch display) on the machine. The software can issue alarm signals via email or telephone. <i>(Option included in top spec on request).</i>	HMI
OFF-ROAD TRAILER	The Off-Road Trailer (OT) allows transport of the AWG units, even in extreme environmental conditions.	OT

TECHNICAL FEATURES V300WT-FW-T

WORKING CONDITIONS	T = 17-45 °C
TANK	Optional - flexible food grade 5mc
SIZE / WEIGHT	860 mm x 560 mm x 355 mm / 38 kg
ELECTRICAL SUPPLY	230 V (single-phase) / 50 Hz or 24 VDC
POWER CONSUMPTION	14 Ah C.A.
CERTIFICATION	CE

TREATED WATER TECHNICAL FEATURES V300WT-FW-T

INPUT SALINITY	Max. 2,000 ppm
TREATED WATER FLOW	Up to 300 litres/hour (7,200 litres/day)
PRE-FILTRATION	Self-cleaning filter 90 micron 24VDC 500 mA
PUMP	Max. 5 bar
WASHABLE MECHANICAL FILTRATION	Cartridge AISI 316 10 micron
TOTAL MECHANICAL FILTRATION	0.05 micron
CHEMICAL FILTRATION	Heavy Metals (removal order Cu > Va > UO ₂ > Pb ²⁺ > Ni ²⁺ > Cd ²⁺ > Fe ²⁺ > Mn > Ca ²⁺ > Mg ²⁺ > Ba)
STERILISATION	CE UV-C with irradiation display (max 10 litres/minute)

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