

MODEL A20L

AQUA VITALE

Pure drinking water —
directly from the air.

- Up to 20 L / day
- 6-Stage Filtration
- Triple UV LED Sterilisation
- Hot & Cold Dispensing
- Designed in Poland



UAE



USA

CAPACITY

20 L / day

HOT WATER

~85 °C

COLD WATER

~6 °C

WEIGHT

46 kg

POWER

470 W

SIZE

37.7×31.4×117.5 cm

Product Overview

The Aqua Vitale A20L is a premium Atmospheric Water Generator (AWG) that harvests moisture directly from the air and converts it into pure, great-tasting drinking water — no pipes, no bottles, no compromise. Designed in Poland exclusively for Aqua Vitale and intended for homes, luxury residences, hotels, offices, yachts and RVs, the A20L delivers up to 20 litres of hot and cold filtered water per day. Its advanced 6-stage filtration system, triple UV LED sterilisation, and automatic 6-hour water-recirculation technology ensure every drop meets the highest quality standards.

Key Features

Atmospheric Water Generation	Extracts water from ambient air via refrigeration-based condensation. Operates at 15–45 °C and 30–99% RH with no plumbing required.
6-Stage Filtration System	Air Filter → Sediment (PPF) → Pre-Carbon (GAC) → Post-Carbon (T33) → Reverse Osmosis (RO) → BIO Mineralisation. All stages standard on every unit.
Triple UV LED Sterilisation	Three independent UV LED lamps — one in the lower collection tank, one in the upper storage tank, and one integrated with the filter stage — continuously eliminate bacteria, viruses and microorganisms.
Hot & Cold Dispensing	Stainless-steel hot tank heats to ~85 °C (185 °F); cold tank chills to ~6 °C (43 °F). Both reach operating temperature within 30 minutes of switch-on.
Auto 6-Hour Recirculation	Exclusive recirculation cycle re-filters all stored water every 6 hours automatically, keeping water fresh without manual intervention.
External Water Connection + Wall Dispenser	Included pressure hose kit (4.5 m) and 1/2" valve allow connection to tap or tank water. An extra dedicated pump is built-in so that an optional wall-mounted water dispenser — also offered by Aqua Vitale — can be connected directly to the unit.
Hot-Water Safety Lock	Dedicated physical press-and-push safety lock prevents accidental dispensing of near-boiling water — essential for families and shared workspaces.
BIO Mineralisation — Standard	Every A20L includes a BIO Mineralisation filter that enriches purified water with beneficial minerals for optimal pH balance and a smooth, premium taste.
Designed in Poland for Aqua Vitale	Engineered and designed exclusively for Aqua Vitale, the A20L reflects European quality standards with a distinctive, award-nominated industrial design by 2s.design, Warsaw.
Energy-Saving Intelligence	Integrated sensors optimise compressor cycles and standby mode to minimise energy consumption without compromising water output.

How It Works — Step by Step

1. Air Intake & Moisture Collection

A Venturi blower draws ambient air through the multi-layer air filter, removing dust and micro-particles. The cleaned humid air passes over refrigeration coils inside the unit.

2. Condensation Process

The R134a refrigeration system cools the evaporator coils below the dew point, causing water vapour to condense into liquid. The automatic defrost cycle melts any ice accumulation into the lower stainless-steel collection tank.

3. Six-Stage Water Purification

Water is pumped through: Air Filter (dust removal) › Sediment Filter (PPF, 5 µm particles) › Pre-Carbon Filter (GAC — chlorine, pesticides, organics) › Post-Carbon Filter (T33 — final taste polishing) › Reverse Osmosis Membrane (RO — deep purification, microplastics, bacteria) › BIO Mineralisation (adds beneficial minerals, balances pH). A UV LED lamp is also integrated at the filter stage for sterilisation.

4. Storage, Heating & Cooling

Purified water fills the upper stainless-steel main storage tank (10 L), protected by a second UV LED lamp. It is then routed to the hot tank (1.5 L, ~85 °C) and the cold tank (1.8 L, ~6 °C). A third UV LED in the lower collection tank provides sterilisation at point of condensate collection. The recirculation system re-filters all stored water every 6 hours.

Water Production Performance (litres / 24 h)

Output varies with ambient temperature and relative humidity. Rated conditions: 30 °C / 80% RH → 20 L/day. Production is often higher at night in humid climates.

Temp \ RH	30%	40%	50%	60%	70%	80%	90%
15 °C	—	2.6	3.5	4.5	6.4	7.0	9.1
20 °C	—	4.2	5.7	6.4	7.9	9.0	12.4
25 °C	3.9	5.3	7.2	9.1	12.8	15.3	18.8
30 °C ★	4.9	6.7	9.2	12.6	17.7	20.0	25.2

★ Rated test conditions per IEC standard.

6-Stage Filtration System

Every Aqua Vitale A20L includes a complete 6-stage filtration system as standard, plus triple UV LED sterilisation at three independent points in the water path. Filter life is automatically monitored and displayed on the control panel.

#	Filter Name	Primary Function	Replacement
1	Air Filter	Removes airborne dust and micro-particles before condensation begins.	Every 3 months*
2	Sediment Filter (PPF)	Captures particles larger than 5 microns — sediment, rust and larger contaminants.	Every 6 months
3	Pre-Carbon Filter (GAC)	Absorbs chlorine, pesticides and organic compounds; improves taste and removes odours.	Every 6 months
4	Post-Carbon Filter (T33)	Final taste-polishing stage — produces a clean, smooth flavour before RO.	Every 6 months
5	Reverse Osmosis Membrane (RO)	Deep purification — removes microplastics, heavy metals, bacteria and ultra-fine particles.	Every 12 months
6	BIO Mineralisation Filter	Enriches purified water with beneficial minerals, balances pH for optimal health benefits and premium taste. Standard on all units.	Every 12 months

* Replacement frequency depends on local air quality. Filter life counters are tracked automatically.

Triple UV LED Sterilisation

Unlike systems with a single UV stage, the Aqua Vitale A20L provides three independent UV LED sterilisation points to guarantee water safety throughout the entire water path:

UV Stage	Location	Function	Replacement
UV LED 1	Lower Collection Tank	Sterilises water at the point of condensation — immediately as water enters the system from the air.	Every 18 months
UV LED 2	Filter Stage	Integrated UV sterilisation within the filtration assembly — kills any remaining microorganisms after filtration.	Every 18 months
UV LED 3	Upper Storage Tank	Continuous sterilisation of stored water in the upper tank — provides ongoing protection before dispensing.	Every 18 months

Components & Control Panel

Component	Description
Microcomputer Control System	Central controller managing water production, filtration, heating, cooling, dispensing, UV cycles and all maintenance alerts.
LCD Touchscreen Panel	Shows ambient temperature (°C/°F), relative humidity (%RH), water level (1/4–full), AWG/HOT/COOL status icons, fault codes (E3–E8) and filter warning numbers.
Venturi Blower	Efficient, low-noise air intake fan with integrated air filter housing. Draws humid air across refrigeration coils.
Hot-Water Safety Lock	Physical press-and-push mechanism — must be deliberately engaged before the hot water lever can be operated.
Hot Water Switch (Red)	Rear-panel switch enables heating element. Water reaches ~85 °C in approximately 30 minutes.
Cold Water Switch (Black)	Rear-panel switch enables compressor cooling circuit. Water chills to ~6 °C in approximately 30 minutes.
Power Switch (Yellow)	Main ON/OFF switch for the entire unit. Located on rear panel.
Water Recirculation System	Exclusive 6-hour automatic re-purification cycle keeps stored water fresh and safe without user intervention.
External Water Connection + Wall Dispenser Pump	Included: blue pressure hose (4.5 m) + 1/2" pressure valve for tap/tank connection (max 4 bar / 58 psi). A dedicated extra pump is built in to power an optional Aqua Vitale wall-mounted water dispenser.
Triple UV LED Sterilisation	Three independent UV LED lamps at: (1) lower collection tank, (2) filter stage, (3) upper storage tank — continuous multi-point sterilisation.
Overheat & Refrigerant Protection	Automatic shutdown if overheating or R134a refrigerant leak is detected.
Water Leak Sensor (E7)	Tray-mounted sensor detects water accumulation and shuts down all operation, displaying Error E7 on the panel.
Adjustable Feet + Rear Wheels	Four adjustable levelling feet for stable placement; rear castor wheels for easy repositioning.
Detachable Drip Tray	Removable front drip tray for hygienic, mess-free dispensing and easy cleaning.
Filter Compartment Door	Front service door (right side) provides quick access to all water filters — no tools required for most replacements.

Technical Specifications

Water Production

Maximum Daily Output	20 L (5.3 gal) / 24 h @ 30 °C / 80% RH
Operating Temperature	15 °C – 45 °C (59 °F – 113 °F)
Operating Humidity	30 – 99% RH
Min. Humidity for AWG	≥ 30% RH (LO warning displayed below threshold)
Hot Water Temperature	~85 °C (185 °F)
Cold Water Temperature	~6 °C (43 °F)
Main Storage Tank Capacity	10 L — food-grade stainless steel
Hot Water Tank Capacity	1.5 L — food-grade stainless steel
Cold Water Tank Capacity	1.8 L — food-grade stainless steel
Min. Level Before Dispensing	1/4 capacity (~2.5 L) — required for safe recirculation

Electrical Specifications

Power — Water Production	470 W
Power — Heating Element	+ 500 W
Power Supply	AC 220 V / 50 Hz or AC 110 V / 60 Hz
Minimum Circuit Breaker	10 A (dedicated, grounded outlet — no extension cords)
Refrigerant	R134a

Physical Dimensions & Weight

Height	1175 mm (117.5 cm / 46.3 in)
Width	314 mm (31.4 cm / 12.4 in)
Depth	370 mm (37.0 cm / 14.6 in)
Lower Body Depth	742 mm (filter/compressor section)
Weight	46 kg (101 lbs)
Required Clearance	30 cm (12 in) on all sides for proper airflow
Mobility	Rear castor wheels + adjustable levelling feet

Design, Display & Materials

Design Origin	Designed in Poland exclusively for Aqua Vitale by 2s.design, Warsaw
Control Panel	LCD Touchscreen with capacitive touch buttons
Display Information	Temperature · Humidity · Water level · AWG/HOT/COOL status · Filter warnings · Fault codes
Available Colours	Titanium (RAL 7047 Tele Gray + Jet Black) Space Gray (RAL 7015 Slate Gray + Jet Black)
Body Materials	Metal sheet (painted) · ABS plastic (painted) · Tempered glass/Plexiglass fascia
Tank Material	Food-grade stainless steel — Main: 10 L · Hot: 1.5 L · Cold: 1.8 L
Noise Level	Low-noise Venturi blower — suitable for home and office
External Water Inlet	1/2" rear port — max 4 bar (58 psi)

Use Environment	Indoor only
Certification	IEC 60335-2-15 (household and similar appliances)

Installation & Initial Setup

No Installation Required

Simply plug into a grounded 10A electrical outlet. No plumbing connection is needed for atmospheric water generation mode.

First-Use Preparation

The unit must stand upright for at least 24 hours before first power-on — critical to protect the compressor from oil settling during transport.

Initial Flush

For the first startup, run the machine until the display shows ~3/4 water level, then fully drain both hot and cold tanks via the white plastic drain caps on the rear of the unit. This clears any residual factory water.

Placement & Clearance

Place on a flat, stable surface with 30 cm of clear space on all sides for airflow. Avoid heat sources, radiators and direct sunlight. Best locations: lobbies, kitchens, indoor gardens, gyms or any well-ventilated, humid indoor space.

External Water Source & Wall Dispenser (Optional)

For continuous supply during low-humidity periods, connect the included pressure hose to a 1/2" municipal or tank water supply (max 4 bar). The built-in extra pump also enables connection of an optional Aqua Vitale wall-mounted water dispenser — contact your Aqua Vitale representative for details.

Filter Check

Before first use, verify all filters are securely tightened. Remove protective plastic film from the display panel.

Recommended Maintenance Schedule

Maintenance Task	Frequency
Exterior cleaning (soft damp cloth)	As needed
Internal tank flush / cleaning	Monthly (or after >2 days without use)
Full system disinfection (citric acid)	After >1 week without use
Air Filter — clean or replace	Every 3 months*
Sediment Filter (PPF)	Every 6 months
Pre-Carbon Filter (GAC)	Every 6 months
Post-Carbon Filter (T33)	Every 6 months
RO Membrane	Every 12 months
BIO Mineralisation Filter	Every 12 months
UV LED Lamp — Lower Tank	Every 18 months
UV LED Lamp — Filter Stage	Every 18 months
UV LED Lamp — Upper Tank	Every 18 months

* Frequency depends on local air quality. Filter life is automatically tracked and displayed on the control panel.

Safety Information

- Use a dedicated, properly grounded 10A outlet. Do not use extension cords or power adapters.
- Hot water reaches ~85 °C (185 °F) — always engage the physical safety lock before dispensing.
- Avoid direct eye exposure to UV LED components. Disconnect power before opening any UV-containing cover.
- Automatic protection: overheat shutdown, refrigerant leak detection and water tray leak sensor (Error E7).
- Indoor use only. Do not operate in explosive, corrosive or high-salt-concentration air environments.
- Do not block air intake or exhaust vents. Do not place objects on top of the unit.
- Always operate in a vertical upright position. Do not tilt more than 20° during transportation.
- Fully drain all tanks before moving or long-term storage.
- Children must use the unit under adult supervision only.
- Only qualified technicians may service the refrigeration or electrical systems.

Colour, Material & Finish (CMF)

Version	Zone	Colour Code	Material	Finish
Titanium	Outer shell & base	RAL 7047 Tele Gray	Metal sheet + paint	Metallic, matt
Titanium	Trim & accents	RAL 7047 Tele Gray	Plastic + paint	Metallic, matt
Titanium	Upper body frame	RAL 9005 Jet Black	Metal sheet + paint	Matt
Titanium	Control fascia	Transparent + Jet Black	Glass / Plexiglass	High-gloss + matt
Space Gray	Outer shell & base	RAL 7015 Slate Gray	Metal sheet + paint	Metallic, matt
Space Gray	Trim & accents	RAL 7015 Slate Gray	Plastic + paint	Metallic, matt
Space Gray	Upper body frame	RAL 9005 Jet Black	Metal sheet + paint	Matt
Space Gray	Control fascia	Transparent + Jet Black	Glass / Plexiglass	High-gloss + matt

Quick Specification Summary

Daily Water Output	20 L / 5.3 gal @ 30 °C / 80% RH
Hot Water Temp	~85 °C (185 °F)
Cold Water Temp	~6 °C (43 °F)
Power — Production	470 W
Power — Heating	+ 500 W
Power Supply	220V/50Hz or 110V/60Hz
Refrigerant	R134a
Filtration Stages	6 stages + BIO Mineralisation (standard)
UV Sterilisation	Triple UV LED (3 independent lamps)
Op. Temperature	15 – 45 °C (59 – 113 °F)
Op. Humidity	30 – 99% RH

Dimensions H×W×D	1175 × 314 × 370 mm
Weight	46 kg (101 lbs)
Tank Material	Food-grade stainless steel
Main Storage Tank	10 L stainless steel
Hot Water Tank	1.5 L stainless steel
Cold Water Tank	1.8 L stainless steel
Design Origin	Designed in Poland for Aqua Vitale
Control Panel	LCD Touchscreen
Colours	Titanium / Space Gray
Standard	IEC 60335-2-15



Pure Water. Straight from the Air.

Contact & Support

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