



Mobile Water Treatment Unit

Drinking water where the supply stopped – and where it never existed.

A trailer-mounted unit under 3.5 tonnes that turns a surface source into drinking water within fifteen minutes of arrival.

DANIEL-LM s.r.o. — AquaTech NorthBohemia Division

Fifteen minutes from arrival to running water

01

You arrive at the source — a river, a pond, a reservoir, a tank.

02

Hoses connect within 5 minutes. Quick couplings, no tools.

03

Nine minutes later the 300-litre treated water tank is full.

04

Water goes to the distribution point.

No site preparation. No connection to a water main. No chemist on site.

From the moment the vehicle stops at the source to the first litre at the distribution point, a quarter of an hour passes.



Two situations, one unit

The unit answers two different problems. Most users recognise themselves in one of them immediately.

The water stopped.

Flooding, a burst main, drought, contamination of the source, a prolonged power failure. The unit is a temporary replacement for a supply that failed. What matters is how fast it can be deployed.

The water was never drinkable.

A river, a reservoir or a shallow well is the only source available all year, but the water cannot be drunk as it is. The unit is a permanent source. What matters is that it removes dissolved contaminants and runs without a chemist.

The same unit, the same four operating facts. Only the reason for buying it changes.

When it is needed



Flooding

The reservoir or the wells are under water. The source is physically there; the water is not drinkable.



Drought

The source has fallen below a usable level. Tankers solve days, not weeks.



Power failure

Pumping equipment stops. The unit works independently of the mains and of the grid.



Camps, remote operations, construction sites

Settlements with no permanent network at all.



A burst or damaged main

Part of a town, a hospital, a school or a social facility is cut off for an unpredictable period.



Contamination

Accidental or deliberate. What counts is how quickly a replacement supply arrives.



Earthquakes, cyclones and seasonal events

That damage distribution networks.



Exercises

Testing a contingency plan before it has to be used for real.

How many people it supplies

The unit produces approximately 45 m³ of treated water per day. How many people that covers depends on the daily allocation you set.

Daily allocation per person	People supplied	Situation
5 litres	up to 9,000	Initial emergency allocation in the first days
10 litres	up to 4,500	Drinking water and basic hygiene
15 litres	up to 3,000	Longer deployment, stabilised operation
20 litres	up to 2,250	Long-term supply and medical facilities

Units in parallel multiply capacity and add redundancy for critical facilities.

Figures are based on design daily output. Actual capacity depends on source quality and operating regime.

Where it takes water from

The unit is built for surface sources. This is the decisive difference from equipment that needs relatively clean water at the inlet.

Rivers, ponds, reservoirs

Fire and storage tanks

Flooded, turbid or shallow wells

Any source available at the site

You do not need to find suitable water first. The unit handles the water that is there.



What it does to the water

The water passes through several stages. In plain terms:

01

Silt, sand and turbidity are removed.

02

Microbial contamination is removed.

03

Pesticides, pharmaceutical residues and the substances that cause taste and odour are captured.

04

The water is disinfected before it leaves the unit.

The result is water that can be distributed to people.

Actual removal always depends on the quality of the raw water. We carry out an analysis before quoting and before deployment.

Four things that decide it in the field

You do not need to know the technology. You need to know what follows from it.

It handles bad water.

The filter elements are ceramic. They cope with clean water and with heavily turbid water alike.

It does not need a chemist.

No coagulant dosing, no pH correction. The operator starts the unit and watches it; nobody mixes chemicals. Two people in alternating shifts, no chemical qualification, trained at handover.

It may stand idle for a year.

The equipment may be drained and left dry. That is its normal state – it works only when needed. Standby is not a compromise.

It lasts.

Ceramic rather than plastic, and no steel parts in the construction, so saline or aggressive water will not destroy it. Operation can be monitored remotely; the operator replaces the filter medium in under ten minutes.

What sets it apart

We do not compare brands. The difference lies in what the unit needs on site, and what it does not.

Question	IZS-M07
Does it need a mains water or power connection?	No
Does the operator have to dose chemicals?	No
Can it handle heavily turbid water?	Yes
Does it address dissolved contaminants – pesticides, pharmaceuticals?	Yes, in a dedicated stage
May it be left idle long-term?	Yes
Does it stay under 3.5 tonnes?	Yes

The only mobile treatment unit under 3.5 t that treats water without coagulant dosing or pH correction – and still has an adsorption stage for micropollutants.

The unit in figures

Parameter	Value
Output	approximately 2 m ³ per hour
Daily capacity	approximately 45 m ³
Weight	under 3.5 tonnes
Treated water tank	300 litres
Operators	2, no chemical qualification required
Time to first water	within 15 minutes of arrival
Source	surface water, no mains connection

When more is needed — the container version

The trailer unit serves a town, a district or an evacuation point. For larger areas there is a container version.

Container version

- Housed in a 40-foot container.
- Output up to 20 m³ per hour.
- Parallel configuration with a bypass — operation need not be interrupted.
- Filter medium replaced while running.

Both versions

Both versions use the same technology. They differ in size and in how they are placed.

What you actually order

A water utility already has trailers. A municipal service already has a generator. The scope of supply is therefore set by what you already have.

1

Scope A — complete trailer unit.

Technology, enclosure, generator and trailer under 3.5 t as one finished assembly, ready for immediate deployment.

2

Scope B — container version.

The same technology in a 40-foot container for larger areas and long-term deployment.

3

Scope C — technology frames only.

For installation into your own trailer, container or fixed building.
The platform and its approval are yours to arrange.

4

Scope D — without generator.

Where reliable mains power is available at the site, or where you already have your own power source.

Scopes can be combined. The technology is identical in all of them; the platform, the power supply and the installation change.

How it is acquired

- Direct purchase by a water utility, a municipality, a regional authority or an operator of critical infrastructure.
- Shared procurement by a group of municipalities or districts — the cost is divided, the availability is not.
- Procurement by a national agency, a civil protection body or a ministry, held centrally and deployed where needed.
- Donor-funded or programme-funded procurement, where we supply the technical documentation required for the application.

We do not sell equipment. We supply readiness, a technical design and operating responsibility.

Delivery lead time: TO BE COMPLETED BEFORE TYPESETTING

Standby agreement: TO BE COMPLETED BEFORE TYPESETTING

Service agreement scope: TO BE COMPLETED BEFORE TYPESETTING

Prices are not published. We prepare a quotation for a specific source and a chosen scope of supply, together with a configuration proposal.

How we proceed

01

Assessment of the situation in your area and identification of available water sources

02

Raw water analysis and a configuration proposal

03

Indicative price and documentation for your budget or funding application

04

Demonstration of the unit on your own source

05

Manufacture and assembly

06

Commissioning and operator training

07

Handover and service regime

The first two steps are offered without obligation.

You do not need to understand it technically

This is a decision document, not project documentation. Its purpose is to let you say: this would work for us, let us look at it with our own specialists.

Technical parameters, the capacity proposal for your location and your water analysis are all reviewed at a joint meeting with your water engineers and our process engineer.

We bring our own process engineer to that meeting. Bring yours – the network operator, the emergency manager, whoever you consider appropriate. The technical annex is ready and will be handed to them.



What we need from you

We arrange the water analysis. Nothing else is needed for a first meeting.

An approximate number of people to be supplied.

What water sources are available in your area.

A contact for the network operator or the person responsible for emergency supply.

Contact

Let us arrange a non-binding consultation and an assessment of the water sources in your area.



Export department

+420 730 330 353



Management and projects

+420 777 321 846



Technology

+420 777 919 877



E-mail

info@aquananotech.eu



Web

www.aquananotech.eu



DANIEL-LM s.r.o. – AquaTech NorthBohemia Division

This material presents the technology to a general audience. It is not project documentation and it is not a guarantee of performance for every type of water. A specific design requires a water analysis and engineering assessment.