

MOBILE AND AUTONOMOUS DRINKING WATER PRODUCTION UNIT

Production

- > 0,3 à 3 m³/h

Raw water / input

- > Sea water
- > Brackish water
- > Polluted fresh water

Applications




- > Natural disaster zones
- > Military operations zone
- > Isolated villages
- > Temporary settlements



CHARACTERISTICS

- > QUICK and EASY installation,
- > COMPACT and TRANSPORTABLE unit (possible installation on 4x4 Pick up),
- > EFFICIENCY and ENERGETICALLY self-sufficient. Possibility of supplying surplus energy
- > Immediate delivery of DRINKING WATER from polluted fresh water, brackish water or sea water,
- > MECHANICAL FILTRATION technology without chemical product ,


TECHNOLOGIES

-  Disc filtration (130 µm)
-  UF membrane filtration (0,08 µm)
-  Reverse osmosis membrane filtration




FRAME

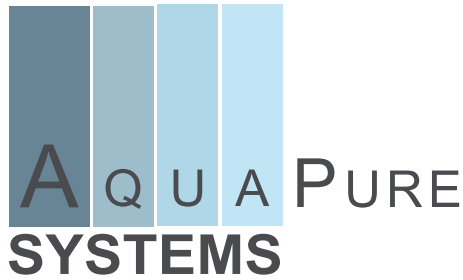
-  Close mobile framework

AUTOMATION

-  Automatic control :
 - > Washing equipment
 - > Quality of water

POWER SUPPLY

-  Solar energy
-  Electrical network
-  Generator



Closed framework on trailer

Closed framework with solar panel



MODELES

Model	Dim	Power supply	Production*		Power kW
			Fresh water		
			m ³ /h	gpm	
N1500	1,7x1,3x1,9	S - E - G	1,5	6,6	1,0
N3000	1,7x1,3x1,5	E - G	3	13,2	1,5

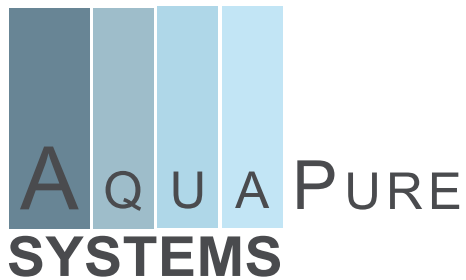
*Design criteria : turbiditu = 15NTU; TSS = 30mg/l; TDS = 4500 mg/l; temperature : 18 °C
S : Solar Energy, E : general power, G : grid generator - Dimension without auxiliary equipment L : Longueur, W : Largeur, H : Hauteur

MAIN COMPONENTS

- > STAINLESS STEEL submersible water pump. For SOLAR MODEL solar powered pump with controller,
- > AZUD AUTOMATIC disk filter including automatic cleaning system,
- > Analog dosing pump for ANTI INCRUSTANT,
- > ULTRAFILTRATION MEMBRANE made of PVDF housed inside PVC casing. Automatic cleaning system included,
- > Active CARBON CARTRIDGE, housed in polypropylene housing,
- > HIGH PRESSURE PUMP made of stainless steel with frequency variation,
- > REVERSE OSMOSIS POLYAMIDE MEMBRANE housed in fiberglass reinforced polyester pressure tubes,
- > RESIDUAL CHLORATION for the treatment of potable water,
- > PLC with touch screen included unit control program,
- > Electrical closed framework with transformers, protections and starters,
- > Very compact CLOSED FRAMEWORK,
- > SOLAR model include foldable solar panel, solar batteries, charger and 4 batteries.

OPTIONS

- > Installed on 4X4 PICK UP or ALL TERRAIN TRAILER steel with double axis included box for the tools and the generator,
- > SINGLE PHASE GENERATOR with AUTOMATIC / MANUAL START,
- > FLEXIBLE TANK for drinking water storage,
- > Remote CONTROL SYSTEM,



WATER QUALITY

RAW WATER/ INPUT

FRESH WATER from rivers, lakes, dams, etc.

- > High level of solids in suspension and high turbidity,
- > Dissolved elements in lower concentration than allowed limits,
- > High level of pathogen and organic matters,

BRACKISH WATER usually from underground aquifers,

- > Low/medium level of solids in suspension,
- > Dissolved elements in significant concentration,
- > Low concentration of organic matters and pathogens,

SEA WATER

- > High concentration of solids in suspension,
- > High concentration of dissolved mineral salts,
- > Medium / high level of pathogens and organic matters.

WATER PRODUCED

Water meeting the quality requirements for drinking water published by the World Health Organization :

- > No microbiological contamination,
- > TDS / SDT < 1 000 mg/l,
- > Turbidity < 1NTU,

INSTALLATION REQUIREMENTS

POWER SUPPLY

single phase // 110/220 V AC // 50/60 Hz.

DIMENSIONS

according to plant dimensions. Maintain a minimum free space of one meter around the unit for maintenance.

OPERATION PARAMETERS

- > Supply pressure : 2- 4 bar
- > Temperature : 0 - 40 °C
- > Water temperature : 5 - 30 °C