PEAK COMPONENTS

WATERS

DESIGNED AND MANUFACTURED IN DENMARK











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In 2014 we formed a technology project within drinking water sector with the Danish Ministry of Defense (MoD) and Danish Emergency Management Agency (DEMA). The goal was to design a powerful and reliable mobile water purification unit that goes beyond the market standard. The units have since been deployed in real world missions around the world in corporation with International Humanitarian Partnership (IHP). The project's intensive 5-year program with torture tests, independent laboratory analysis and exposure to extreme climates set the track record for WATERS. Today, it operates in five different continents supporting governments' civil protection missions with an unmatched system reliability and durability.



The high-performance flow technology gives you a tremendous flow rate in an ultra-compact package (footprint 0.29m²). When other electrical and fuel powered systems flows with a rate of 5 to 20 liters per minute, WATERS offers an incredible 32 liters per minute in manual mode free from electricity, heavy generators, and fossil fuel. WATERS is a micro water plant able to outperform much larger systems and ready to be deployed anywhere with maximum logistic freedom. WATERS is a blend of aerospace materials and state-of-the-art technologies to withstand wear, tear, and corrosion in the wild.



The dynamic balance of Alpha and Omega filter setup has an extremely powerful retention capability that cuts off sediment, bacteria, virus, cysts, chemicals, organic compound, and even free parasite DNA. Coupled with the ability to survive a wide spectrum of temperatures sets WATERS apart from all competitions. Where other fails in sub-zero conditions and microorganism stagnation, WATERS continues to work independently and efficiently without leaving waste products or comprowatmise system integrity and performance in the field.



Unlike other purification systems on market that requires additional equipment to maintain own system serviceability, WATERS has all maintenance equipment integrated onboard. We have intelligently engineered most parts to be "dual purpose", meaning each part can serve continuous hydration needs on endurance missions. This minimalistic mechanical design approach results in fewer system parts and much easier field operation with enhanced sustainability in disaster zones.



WATERS has a tool-less design layout that requires no more than a knife to strip down the system in the field. The end user can setup WATERS in less than 60 seconds. The parts are engineered with an "interweaved" layout for maximum structural strength and reduced part counts. A simplistic, yet meticulously designed piece of equipment that is often underestimated due to its bold and simple appearance. WATERS contains no fragile components such as manometers, UV lamps etc. Instead, these parts are replaced by custom made rugged mechanical components to achieve rock solid reliability and durability.



WATERS act as a modular platform to fully corporate with third party pump setups, such as 230V, solar powered etc. The AUTONOMOUS add-on module, shown above, was designed in corporation with DEMA to achieve automatic water filtration. Third party pumps can always be bypassed with onboard manual pump for vital redundancy in the field.

The modularity and flexibility of WATERS is unseen, as third-party pumps can be integrated onto the system with very few modifications.



VIRUS LOG¹

BACTERIA LOG

WATERS purification exceeds the EPA's Drinking Water Regulations as well as the Danish drinking water standard. This includes, but not limited to, the following elements: Pathogens: Giardia intestinalis, Escherichia coli, Cryptosporidium parvum, Polio virus, Echovirus, Coxsackie virus and Adenovirus. Chemicals: Arsenic, nitrates, nitrites, phosphorus, fluorid, benzene, naphthalene, trichloroethylene, carbon tetrachloride, 1,1,1-trichloroethane, trichloroethylene, tetrachlorethylene, dichlorethane, antimony and mercury. Metals: Aluminum, bor, barium, bismuth, calcium, cadmium, cobalt, chromium, copper, iron, gallium, indium, potassium, lithium, magnesium, manganese, sodium, nickel, lead, strontium, titanium and zinc. Oil & gasoline products: C6H6 n-C10, nC10 – nC15, nC15 – nC20 and nC20 – nC35. Organic compound: Acenaphthen, fluorene, phenanthrene, fluoranthene, pyrene, indeno, perylene, nonylphenol, nonylphenol monoethoxylat, and nonylphenol ethoxylate. Tests reports are available upon request.



MODEL: WATERS

DIMENSION: 640 x 430 x 199

WEIGHT: ~19 kg

FEATURES: Low system maintenance/service Up to 300.000 liters of safe drinking water per filter Fully certified by accredited third party laboratories Flow rate: 32+ l/min. Integrated Pressure Relief Valve Stasis core Extreme temperature technology 0 °C - 85 °C Chlorine Reduction Silt Density Index (SDI) Dirt Holding Capacity Heavy metal retention (export code: HS 842121)

Cyst LOG 4, Virus LOG 3, Bacteria LOG 6 (Serum Institute & Force Technology) (46 m3 per day) (display free system) (anti bacterial accumulation) (tolerates freeze/thaw cycles) (2 ppm - 1 ppm for >18,927 liters @ 3.78 ltr/min. flow rate) (< 1.0 + 0.1) (82 g/ 0.3 m²) (contact us for full disclosure)

WATERS

Peak Components ApS www.peakcomponents.dk | info@peakcomponents.dk