

ASPEN 5500M DESIGN CRITERIA

NSN 4610-01-584-8707

This Product Available On

GSA Advantage!®



The **ASPEN 5500M** is a fully-enclosed expeditionary, non-saline water purification system. It supplies 4,000-5,500 gallons (15,142-20,820 liters) per day, approximately 170-210 gallons (644-795 liters) per hour, of highly purified water from virtually any non-saline water source. Water can be drawn from ditches, rivers, lakes or standing water that may contain chemical and/or biological contamination.

Dimensions. Stackable cases are 43.5"x21"x28" (110.5cm x 71.1cm x 53.3cm). Approximate dry weight of the Aspen 5500M is 170 lbs (77 kg), designed for a four-person carry. The Support Case weighs approximately 110 lbs (50 kg), for a two-person carry.

The Purification Process and General Information

Multi-Stage Pre-filtration. Stage one (foot valve) removes larger debris before it enters into the second stage (external mesh pre-filter screen), which protects the boost pump from debris. Third, the 5 micron pleated pre-filter cartridge removes sand and dirt. The fourth stage screens very fine particulates, including harmful microorganisms such as paramecium, amoeba, Giardia, cryptosporidium and other small matter, down to 1 micron in size.

Contaminant Removal. The replaceable media canister effectively treats 40,000-50,000 gallons (151,416-189,271 liters) of surface water containing high levels of man-made pollutants such as solvents, insecticides and petro-chemicals and other contaminants such as lead, barium, and selenium. When used primarily to eliminate possible microbial contamination in clear water, the canister may be used for up to 75,000 gallons. The 5500M is most effective when the flow rate does not exceed 3.5 gallons per minute.

Disinfecting. An ultraviolet (UV) lamp system is included. Rated at 10 gallons (38 liters) per minute), it provides as much as twice the safety factor required by US regulatory agencies and exceeds World Health Organization (WHO) standards for total disinfection. UV is much faster-acting than chlorine bleach and has been found to destroy over 99.99% of pathogens, including E. coli, cholera, typhoid, anthrax and polio.

Post Filtration. After treatment by the media canister and UV disinfection, the optional final step is post-filtration to remove tannins that may cause the water to have a brownish tint.

Note: Water to be stored should be treated

with chlorine. An optional chlorine dosing unit is available.

Power Source. Operates on single phase 90 to 260 volts AC at 50 or 60 hertz as well as 10 to 30 volts DC, virtually any power source. The maximum power consumption is less than 200 watts. Run time on a fully charged battery alone is 2 to 3 hours. Unit comes standard with a NATO 24-volt DC power cable.

Pressure. The variable-speed, self-priming, low-voltage pump can draw water up to 12 feet and provides water on demand at pressures between 22-45 pounds per square inch (PSI).

Triple Mode Display. A digital display shows the volume of water passing through the system, total run time of the filter canister, and the total run time of the UV exposure unit.

Safety Features. The operating and monitoring components are designed with dual protective shutdown circuitry. In the event of a failure during the disinfecting process, the overall system automatically shuts down. The pump will turn off and a valve will close, stopping water from passing through the system.

Support Case. Contains accessories, expendables and spare/replacement parts. For complete list see section "Support Case Contents."

Additional options also available in cases:

- 360 Watt Foldable Solar Array
- Potable Water Storage Bladders from 150-2500 gallons (568-9464 liters)
- Post Filtration Unit
- Water-driven Chlorinator with Holding Tank

ASPEN 5500M SUPPORT CASE



90-260 VAC 50/60
Hz Single Phase



22-30 VDC



10-15 VDC



Replacement Pump



Sump Wrench



1 Micron
Pre-Filter



5 Micron
Pre-Filter



Post
Filter



Media
Canister



Optional Post
Filter
Assembly



UV Bulb & Quartz
Sleeve Containers



Filter
Cleaning
Wand



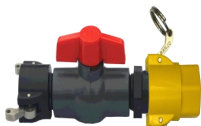
Screwdriver



Clamps



Hose
Adapter
Set



Ball Valve
Assembly &
Female Gender
Changer



Thumb
Screws



Travel
Adapter



Filter
Connectors



Dust Cap



Female
Camlock
NPT



Female
Camlock
HB



Spray
Nozzle



Collapsible Bucket



Anchor



Anchor Line
Assembly



Floatation Cross &
Foot Valve/Strainer

ASPEN 5500M SUPPORT CASE CONTENTS

Aspen 5500M Support Case		
Qty	Item	Part Number
1	Anchor Assembly	AWI-55-EX-A01
1	Anchor Line Assembly	AWI-SC-1DM-A30
1	Collapsible Bucket, 6 Gallon	AWI-SC-1001
1	Cord, NATO, Small Connector	AWI-55-PC-24VS
1	Cord, Power 12 Volt	AWI-55-PC-12V
1	Float Assembly	AWI-55-EX-A10
1	Hose Bracket	AWI-55-FA-011
1	Inlet Float Strainer	AWI-SC-1DM-A08
1	Knob, 5/16-18 Thru Hole, 1-3/4 Dia.	AWI-55-FA-051
2	Media Canister Assembly	AWI-5M-MedCan
1	Mesh Strainer Assembly, Clear	AWI-55-EX-A02
1	O-Ring & Tool Kit Assembly	AWI-55-EX-A50
1	Post Filter Assy (if purchased as option)	AWI-PF-55-A02
1	Pre-filter Cleaning Wand 20" filters	AWI-SC-55-A01
3	Pre-Filter, 1 Mic, 20x4.5 Dia, Black Cap	AWI-FL-1DM-007
3	Pre-Filter, 5 Mic, 20x4.5 Dia, Cream Cap	AWI-FL-1DM-005
1	Pump Assembly, 5500	AWI-PMP-55-A01
1	Stake	AWI-SC-1DM-066
3	Sub Mic Post Filter (if purchased as option)	AWI-FL-55-006
1	Tubing, Repair length	AWI-55-EX-007
2	UV Bulb	AWI-5M-UV-BLB
2	UV Sleeve	AWI-55-EX-A20
1	Wrench, Sump Large, Black	AWI-55-EX-017
1	Wrench, Sump, small	AWI-SC-1D-SSW-1
O-Ring & Tool Kit Assembly P/N: AWI-55-EX-A50		
1	O-Ring/Gasket Set	AWI-55-EX-A30
1	Adapter/Tool Kit	AWI-55-EX-A40
1	Case, Blow Molded	AWI-55-EX-050-A
1	Travel Adapter	AWI-HDE-J19
1	Screwdriver, Multipurpose	AWI-SC-1DM-121
1	Assembly, Water Sprayer	AWI-55-EX-A09
1	Hand Sanitizer	AWI-SANITIZER
1	Foot Valve Strainer Assy	AWI-55-EX-A11
1	Ball Valve Assembly	AWI-BV-ASSY
1	Stake, Plastic	AWI-SC-1DM-070

Aspen 5500M and Aspen 1800BC Pictured



Aspen 5500M Water Purification System on Natural Stream



Aspen 5500M with Flotation Device
with Foot Valve/Strainer



Aspen 1800BC Water Purification
System on Drainage Ditch