



Outdoor Retailer Summer Market 2007

Water Filters

When it comes to filters, the key words were "hollow fiber." First introduced by Sawyer, this technology is coming on strong. Its key advantage is a high flow rate, always a bugaboo for water filters.

PRISMEDICAL

[Prismedical](#) was at OR last year, hawking a repackaged version of their Mainstream filter designed to produce sterile water for medical uses in the field. The lesson they took home was they needed to go back to the drawing board and come up with a purpose-designed outdoor and military field product. This year they showed up with the Triton M series of water filters, garnering a lot more attention.

This is a modular design with components that can be used together or separately. Each is contained in an ABS plastic housing and they screw together as needed.

The most basic module uses hollow fiber technology to filter down to .3 microns absolute. With that limit, you'll still need a viral agent if that's a concern and they currently provide a small bottle of sodium hypochlorite (chlorine bleach to the rest of us) which is used to pre-treat the water, 3-4 drops per liter. Free chlorine test strips are included to assist the user in confirming viral inactivation. A tablet instead of liquid is a future possibility.

A carbon module uses activated granular carbon to improve taste, odor and clarity. It also targets volatile organic compounds (VOCs), pesticides and herbicides. Activated carbon is particularly effective at removing chlorine, so that chlorine pre-treat will be eliminated. In other words, make sure you allow the pre-treat enough time to do its thing before you run it through the carbon module.

There's a "deionization resin" module that is claimed to reduce the amount of lead, arsenic and other chemicals and heavy metals.



Finally, there's a pre-filter module to get the large gunk out before it clogs the other modules.

Depending on the configuration, TRITON M systems can achieve flow rates of up to 1 liter per minute and volume output of approximately 500 liters. When the carbon module is added to the hollow fiber module the flow rate is .5 liters per minute. We were not provided the flow rates of all three modules, but it's probably safe to assume that the more modules, the slower the flow rate.

PRISMEDICAL is offering the product in five distinct configurations. Just to make matters more confusing, each is offered in both a blue housing, for the civilian market, and in [a desert tan housing for the military and tactical markets](#). The product line includes:

The modules and systems range from just under 3 ounces to 13 ounces

TRITON MC Hydration Pack Water Filter (\$40) includes only the Carbon module to improve the aesthetic quality of typical drinking water. At slightly over 6 inches in length and weighing less than 3 ounces, the MC is designed to be inserted into the drink tube of virtually any hydration pack or reservoir. The module is 5 x 1.8 inches and weighs 2.8 ounces.



TRITON M1 Hydration Pack Water Purification System (\$60) includes the anti-virus treatment and the hollow fiber module. The M1 is also designed to be inserted into the drink tube of virtually any hydration pack or reservoir. The M1 also includes the anti-virus solution and the test strips.

TRITON M2 Hydration Pack Water Purification System (\$80) adds the carbon module to the M1's hollow fiber module and anti-virus treatment. The two filters combined weigh 4.1 ounces. The M2 also includes the anti-virus solution and the test strips.

TRITON M2 Multi-Purpose Water Purification System (\$100) is a gravity system that includes two 3-liter roll-top plastic bags (one for source water and another for collecting purified water) are added to the M2 filter combo along with a storage sack.

TRITON M2 Traveler is essentially the same as an M2 Multi-purpose, but uses smaller 1-liter source and clean water pouches. The Traveler's 1 liter drinking water pouch has a pop-up drinking cap and stands on its own when filled with water. The Traveler also includes the anti-virus solution and the test strips. A nylon case keeps the filter modules, plastic bags, tubes and clamps, etc. organized for easy use. It is small enough to fit in a suitcase or carry on bag.

TRITON M3 Multi-purpose Water Purification System ("roughly" \$115) includes all three modules (carbon, hollow fiber and resin), the anti-virus solution, test strips and the 3-liter bags and hoses.

Each configuration, except the Traveler and MC, also includes the pre-filter. The source and clean water bags are reputed to be tough enough to drive over without damage. They are not really designed as hydration packs, but it would be simple enough to use a hydration pack to replace the clean water bag.

The connecting hoses are less than a foot long, so it's apparently not necessary to have much head for the gravity filter configuration. A plastic pinch-off clamp is installed on both the inlet and outlet hoses.

The hoses are attached to the bags with quick connects, so it's easy to set up and take down the gravity filters. The one-liter clean water bag has a capped spout, but the three-liter clean water bag only had the inlet port for a hose. A capped spout is planned for the 3-liter bag as well.

PRISMEDICAL expect first deliveries in October.