

OptiSep® 1000 Filter Holder and Module

Laboratory filtration!

The OptiSep® 1000 is the perfect laboratory module for all bench top filtration applications including cell separation, protein concentration, and diafiltration of salts. These convenient and economical modules are compatible with your existing laboratory equipment. Whether you are developing a process for future scale-up or performing scale down trials, OptiSep filter modules with the patented *SmartFlow*® technology offer improved fluid dynamics providing true linear scalability, maximum yields, and decreased processing times.

OptiSep filter modules are available in a broad range of membrane pore sizes and polymers, making the OptiSep 1000 an ideal tool for laboratory TFF testing / optimization of operations such as harvesting culture bags and bench top fermentors. OptiSep 1000 modules provide the opportunity to compare membrane options, channel heights, shear rates, and TMP. In addition, these modules offer a unique dual mode of operation allowing the module to be configured in either cross-flow (TFF) or dead end cartridge mode.

- **Patented *SmartFlow*® technology for improved fluid dynamics**
- **Accurate scale-up to production TFF systems**
- **Wide range of membrane materials and pore sizes for UF and MF applications**
- **Easy to clean and cost effective for reproducible results regardless of scale**
- **Higher yields from improved design and better fluid dynamics**

Validation and Support

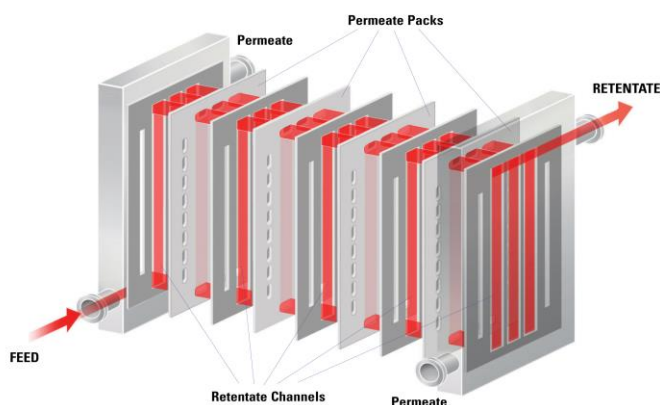
In addition to its market leading Applications and Technical Support, SmartFlow Technologies also offers Validation Support. These programs provide experienced and dedicated application specialists, process engineers, and validation support engineers to assist you with process development and process optimization programs, as well as integrating PuroSep® systems and OptiSep filter modules into your process so that you can quickly realize the benefits provided by *SmartFlow* TFF technology.

Optimized Bench Top Performance

- **Cell Culture Bags**
- **Bench Top Fermentors**
- **Desalting Column Eluates**
- **MF and UF Applications**

Specifications

Standard Membrane Ranges Available	Regenerated Cellulose: 10, 30, 100 kDa Polyethersulfone: 4 – 1000 kDa Nylon: 0.1 – 0.8µm Contact SmartFlow Technologies for a complete list of membranes available for the OptiSep® 1000 Holder
Volume Range	100mL to 10L
Internal dead volume	Approximately 10ml
Pressure rating	60 psig (4.1 Bar)
Standard Holder Connections	Inlet and Outlet: ½" TC Pressure gauge ports: ½" TC (2 tri-clamp gauges included) Two 3/8" (9.5mm) hose barb permeate ports
Standard Channel Heights	0.375mm, 0.5mm, 0.65mm, 0.75mm, 0.875mm, 1.0mm, 1.5mm, 2mm, 3mm
Membrane Area (Four Module Sizes Available)	0.007m ² (0.08 ft ²) 0.045m ² (0.5 ft ²) 0.022m ² (0.25 ft ²) 0.075m ² (0.8 ft ²) ** Modules are stackable in both parallel and series flow paths.
Component Material	Based on supplier information, no critical components contain material from an animal origin. All material utilized in module manufacture requires an approved and acceptable certificate of conformance from the supplier, including successful test reports.
Integrity Testing	All SmartFlow Technologies modules must pass an approved integrity testing procedure based on air diffusion through a wetted module.



SmartFlow® TFF: “Delivering the promise of TRUE TFF Functionality”

The *SmartFlow*® performance advantage comes from the patented *SmartFlow* tangential flow filtration technology. The *SmartFlow* technology in the OptiSep® filter module is comprised of two primary developments: 1) unique flow channels and 2) diagonally opposed inlet and outlet ports provide uniform fluid dynamics. These advancements allow for consistent fluid distribution across the entire membrane surface. The benefits of *SmartFlow* technology include: improved cleaning, increased flux rate, true linear scalability, and increased yields resulting in more efficient downstream processes than in traditional TFF.

OptiSep 1000 Holder

Description	Catalogue Number
OptiSep® 1000 Holder ½" Inlet / Outlet With two (2) tri-clamp pressure gauges 0-100 psig (0-7 bar)	30-900-2050

To Place an Order or Receive Additional Information, please contact our global headquarters:

SmartFlow Technologies
3308 Lee Avenue
Sanford, NC 27332
Phone: (919) 387-8460
E-mail: info@smartflow-tech.com
Website: www.smartflow-tech.com
www.smartflowindustrial.com