



OptiSep[®] 7000 Filter Holder and Module

Ideal for pilot plant or manufacturing suite

The OptiSep 7000 is the perfect pilot plant / production module designed to match the downstream processing needs of 5L to 2000L. The OptiSep 7000 holder is available with either a 1" TC low hold-up volume manifold or a 2" TC low pressure drop manifold. The low pressure drop 2" manifold provides the perfect cell harvesting format while the 1" manifold is the optimum design for dilute proteins requiring a low hold-up volume to achieve high concentration factors.

Incorporating the patented *SmartFlow*[®] technology, OptiSep filter modules offer improved fluid dynamics providing true linear scalability, optimized yields, decreased downstream process time, and lower costs.

OptiSep filter modules are available in a broad range of membrane pore sizes and polymers making the OptiSep 7000 an exceptional production module ideal for a broad spectrum of applications from cell harvest to buffer exchange for formulation. OptiSep *SmartFlow*[®] modules are the filtration technology that will meet your process requirements and deliver significant improvements to your downstream productivity.

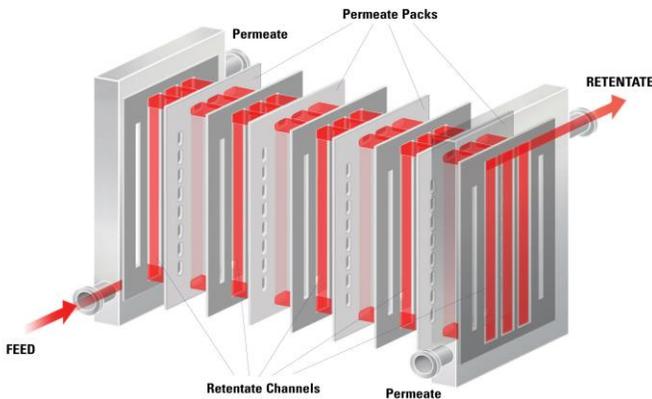
Validation and Support

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.

- **Patented *SmartFlow*[®] technology for improved fluid dynamics**
- **Accurate scale up to OptiSep 11000 or scale down to OptiSep 1000 or OptiSep 3000**
- **Widest range of membrane materials and pore sizes for MF, UF, NF and low pressure RO applications**
- **Easy to clean and cost effective for reproducible results regardless of scale**
- **Higher yields from improved design and better fluid dynamics**

Specifications

Standard Membrane Ranges Available	Regenerated Cellulose: 10.30.100 kDa Polyethersulfone: 4 – 1000 kDa Nylon: 0.1 – 0.8µm Composite materials: NF and low pressure RO Contact SmartFlow Technologies for a complete list of membranes available for the OptiSep 7000 Holder
Volume Range	5L to 2000L
Internal dead volume	0.15 L for the 1" TC Manifold 0.85 L for the 2" TC Manifold
Pressure rating	150 psig (10.3 Bar)
Standard Holder Connections	Inlet and Outlet: 1" or 2" TC Two 1/2" TC pressure transducer ports Four 3/4" TC permeate ports
Standard Channel Heights	0.375mm, 0.5mm, 0.65mm, 0.75mm, 0.875mm, 1.0mm, 1.5mm, 2 mm, 3mm
Membrane Area (Three Module Sizes Available)	0.5m ² (5 ft ²) 0.9 m ² (10 ft ²) 1.8 m ² (20 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 7000 Holder and Modules

Description	Catalogue Number
OptiSep 7000 Holder 1" TC Inlet/Outlet	40-900-2100
OptiSep 7000 Holder 2" TC Inlet/Outlet	40-900-2200
OptiSep 7000 Filter Module 0.5 m ² (5 ft ²)	43-XXX-XXXX
OptiSep 7000 Filter Module 0.9 m ² (10 ft ²)	41-XXX-XXXX
OptiSep 7000 Filter Module 1.8 m ² (20 ft ²)	42-XXX-XXXX

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