

## LENNTECH

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## DOW IntegraPac<sup>™</sup> Ultrafiltration Modules for Potable Use Model IPD-51



The DOW IntegraPac<sup>™</sup> Ultrafiltration IPD-51 modules are made from high strength, hollow fiber membranes engineered to reduce design and fabrication requirements with features and benefits including:

- 0.03 µm pore size which facilitates removal of bacteria, viruses, and particulates; Up to 5.90 log removal of bacteria, up to a 2.54 log removal of viruses, and <2.5 SDI filtrate quality</li>
- PVDF polymeric hollow fibers for high strength and chemical resistance allows long membrane life
- Outside-in flow configuration for high tolerance to feed solids that help reduce the need for pretreatment processes
- Innovative end-caps facilitate direct coupling of modules, eliminating the need for piping manifolds
- Tested and Certified by NSF International under NSF/ANSI standard 61 ensuring safe use in drinking water applications



Due to its direct module coupling resulting in a compact design, these modules are an excellent choice for systems requiring a small footprint. The shorter IPD-51 module is suitable for applications with constraints in head space.

DOW IntegraPac<sup>™</sup> Ultrafiltration IPD-51 modules can be used on a wide variety of water sources, such as groundwater, surface water, and seawater to produce safe and healthy drinking water.

## DOW IntegraPac<sup>™</sup> Ultrafiltration Module Specifications

Model	Туре	Part Number	Membr	ane Area	Wei (empty/wa	ght ter filled)	Hold-I	Up Volume
			m²	ft²	kg	lbs	liters	gallons
IPD-51	NSF/ANSI 61 Drinking Water	11033710	51	549	53/102	117/225	49	13



Model	Units	Length				Diameter	Wie	dth
		L	L1	L2	L3	D	W1	W2
IPD-51	SI (mm)	1988	1500	1689	1864	225	360	342
	US (inch)	78.3	59.1	66.5	73.4	8.9	14.2	13.5



TSS (max)

Turbidity (max)

Operating Parameters		
	SI Units	US Units
IPD-51 Filtrate Flux @25°C	50-115 l/m²/hr	29-68 gfd
pH, Operating	2-11	2-11
pH, Cleaning	2-12	2-12
Temperature	1-40ºC	34 - 104ºF
Max. Inlet Module Pressure (@20°C)	6.25 bar	93.75 psi
Max. Operating TMP	2.1 bar	30 psi
Max. Operating Air Scour Flow	12 Nm <sup>3</sup> /hr	7.1 scfm
Max. Backwash Pressure	2.5 bar	36 psi
NaOCI (max)	200	) mg/L

	Particle Size (max)	300 µm				
	Flow Configuration	Outside-in				
	Expected Filtrate Turbidity	≤0.1 NTU				
	Expected Filtrate SDI	≤2.5				
Important Information	Proper start-up of an ultrafiltration system is essential to prepare the membranes for operating service and to help prevent membrane damage. Following the proper start-up sequence also helps ensure that system operating parameters conform to design specifications so that system water quality and productivity goals can be achieved. Before initiating system start-up procedures, membrane pretreatment, installation of the membrane modules, instrument calibration and other system checks should be completed. Please refer to the product technical manual					
Operational Guidelines						

Avoid any abrupt pressure variations during start-up, shutdown, cleaning or other sequences to prevent possible membrane damage. Flush the ultrafiltration system to remove shipping solution prior to start-up. Remove residual air from the system prior to start-up. Manually start the equipment. Target a filtrate flow of 60% of design during initial operations. Depending on the application, filtrate obtained from initial operations should be discarded. Please refer to the product manual.

**General Information** 

**Regulatory Note** 

If operating limits and guidelines given in this bulletin are not strictly followed, the limited warranty will be null and void. Refer to the Dow Ultrafiltration Module Limited Warranty for more detail.

To prevent biological growth during extended system shutdowns, it is recommended that storage solution be injected into the membrane modules. Please refer to the product technical manual.

NSF/ANSI 61 certified drinking water modules require specific conditioning procedures prior to producing potable water. Please refer to the product technical manual flushing section for specific procedures. Drinking water modules may be subjected to additional regulatory restrictions in some countries. Please check local regulatory guidelines and application status before use and sales.

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Warning: The use of this product does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

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100 mg/L

300 NTU