

Nephro HDF™

NephroCan

HEMODIAFILTRATION MACHINE



**RETHINKING
HEMODIALYSIS**



2025

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CANADIAN LEADER IN HEMODIALYSIS



As a trusted Canadian provider, we are committed to delivering high-quality hemodialysis consumables, machinery, and equipment worldwide. Our goal is to ensure that our offerings are accessible and enhance patient care. We are dedicated to pioneering innovative therapies that revolutionize renal therapy, improving outcomes and enhancing the quality of life for patients globally.

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HEMODIAFILTRATION MACHINE

The NephroHDF™ is a innovative hemodiafiltration machine that significantly enhances toxin removal for patients with kidney failure, using advanced diffusive and convective solute transport technologies. It features a high-flux membrane capable of filtering larger molecules overlooked by traditional hemodialysis, ensuring comprehensive blood purification.

This machine offers dual or triple pump configurations for both pre and post-dilution treatments and includes automated priming and flushing with online dialysate substitution. The sophisticated monitoring systems and sensors dynamically regulate blood flow, pressure, and composition, enhancing patient safety and comfort.

With programmable interfaces, the NephroHDF™ allows for customized treatments, boosting efficiency and reducing side effects such as low blood pressure and muscle cramps. Additionally, its eco-conscious design decreases saline consumption, acid intake, and energy use, making it a sustainable option for dialysis centers.

NEPHROHDF CHARACTERISTICS

User-friendly and personalized, with a 15-inch PCAP touchscreen interface, blood pressure and physiological monitoring, patient access card database, and cloud communication

Servo System ensures smooth blood flow, allowing for precise anticoagulation injection during treatment

Extremely precise ultrafiltration control parameters that provide detailed measurements of the ultrafiltration (UF) rate

One-of-a-kind inline ultrasonic technology for measurement of UF rate, reducing risk of contamination and decreasing the required system volume

Maintenance-friendly, modular and advanced electronic control systems, designed for functionality and ease of accessibility for maintenance



Hemodiafiltration Machine Specifications

Device Element	Performance Task	Specifications	
Treatment Types		HD, pre and post dilution	
Eco-conscious priming		Automatic priming with saline saving consumption options	
Endotoxin Filter		Two inline filters	
Ultrafiltration System	<i>Net fluid removal</i>	100 mL/Hr - 2000 mL/Hr	Error less than 100 mL/Hr
	<i>Measurement type</i>	Online noninvasive flow metric measurement system	
Dialysate Section	<i>Bicarbonate concentration (non-invasive sensors)</i>	2.4 mS/cm - 3.6 mS/cm	Error less than 10%
	<i>Sodium concentrate (non-invasive sensors)</i>	13.5 mS/cm - 15.5 mS/cm	Error less than 5%
	<i>Dialysate temperature</i>	34°C - 39°C	Error less than 0.5°C
	<i>Dialysate time</i>	15 min - 10 hr	No error
	<i>Dialysate flow rate</i>	300 mL/min - 700 mL/min	Error less than 2%
	<i>Bicarbonate type</i>	Cartridge container	
Hematic Section	<i>Blood flow rate</i>	20 mL/min - 700 mL/min	Error less than 10%
	<i>Blood pump</i>	2 or 3 pumps	
	<i>Blood sensors</i>	Blood detection for highest patient safety during connection and disconnection of the patient	
		Ultrasound air detector closest position to clamp with internal self-test and detection of air bubbles > 40 µl	
Blood Pressure Sensor	<i>Range</i>	-450 mmHg to 450 mmHg	
	<i>Error</i>	< 1 mmHg	
Blood Sensor		Blood leakage detection with the resolution of 0.35 mL/min in highest dialysate flow	
Anticoagulation	<i>Heparin pump</i>	Step motor driving with accurate linear system	Configurable in software with different syringe type and sizes
		Syringe size	10 mL & 20 mL
		Error	< 5%
		Working program	Bolus or continuous dosing Programmable stop time Dosing profile
Disinfection		Hot rinse, chemical, hot chemical	
Electrical System	<i>CPU and protection system</i>	Embedded system	
	<i>Interface</i>	Size	15 inch
		Pixels	1024×768
		Touch screen	PCAP
	<i>Other programs</i>	Total conductivity profiling	
UF profiling			
Customized menu for troubleshooting			
Kt/V measurement			
Options		Patient blood pressure monitoring	
		Online real UF measurement	
		Patient card tracking system	
		Blood volume management	
		Cloud communication	



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