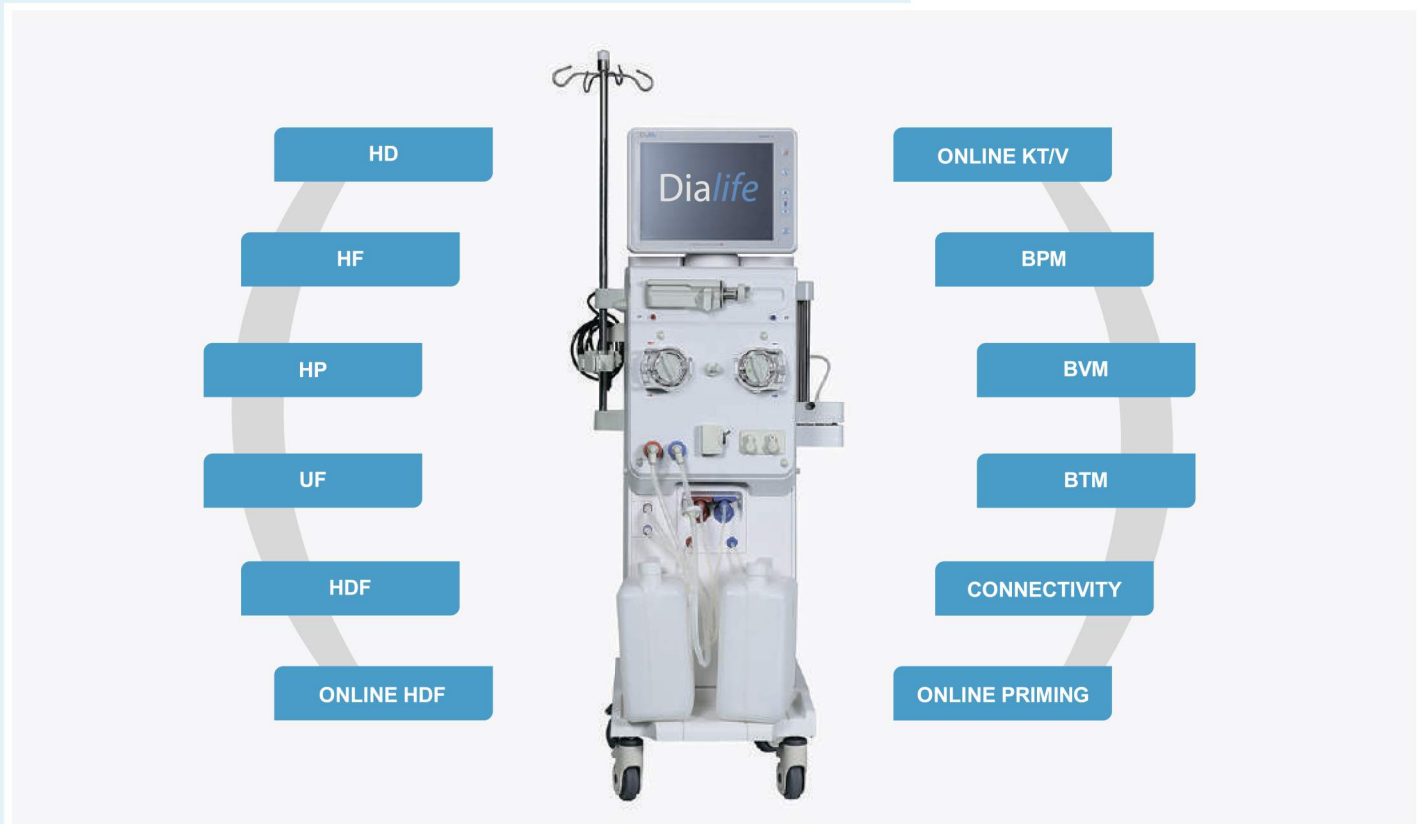


## DIANOVA SERIES HEMODIALYSIS MACHINE

**Dialife**  
SWISS QUALITY DIALYSIS 



**PREMIUM SYSTEM FOR  
ADVANCED DIALYSIS CARE**



# DIANOVA HD SYSTEM

**Dialife**  
SWISS QUALITY DIALYSIS

## Complete Therapy Range

Machine Models	Pump Systems	Clinical Applications
<b>DIANOVA X1</b>	Blood Pump Heparin Pump	Hemodialysis Hemoperfusion Ultrafiltration
<b>DIANOVA X2</b>	Blood Pump Heparin Pump Substitution Pump	Hemodialysis Hemofiltration Hemoperfusion Ultrafiltration Hemodiafiltration Online Hemodiafiltration

## Comprehensive Monitoring



- **ONLINE KT/V MONITORING:** ensures proper dialysis dose is delivered in real time.
- **BLOOD PRESSURE MONITORING:** automated and non-invasive system to control blood pressure.
- **BLOOD VOLUME MONITORING:** allows ultrafiltration monitoring according to blood volume variations.
- **BLOOD TEMPERATURE MONITORING:** controls body temperature to ensure hemodynamic balance.
- **NETWORK MONITORING:** interface to connect to renal unit software for centralized data management; USB port also available as alternative to download data.



**STATE-OF-THE-ART TECHNOLOGY.  
REAL TIME 360° MONITORING.  
YET VERSATILE AND EASY-TO-USE.**

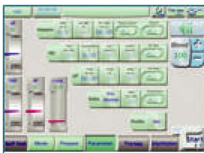
## Advanced Support Features



- Flat, rotating 15-inch touch screen for increased readability and convenience.
- Ingenious, user-friendly software with high degree of monitoring and personalization.



- Bicarbonate cartridge connection to optimize hygiene, cleanliness and safety.
- Automated, online priming without the use of serum nor personnel intervention.
- Heparin pump designed for multiple syringe sizes with automated syringe size detection, self-test alarm system and heparin profiling.



- VP air detector with dual ultrasonic and optical monitoring system for precise bubble catching, safe blood return and continuous micro-bubble detection.



- Endotoxin filtration system: single stage on DIANOVA X1 model for high purity HD and double-stage on DIANOVA X2 model for HDF online.
- 40 min back-up battery in the event of power outage.
- Facilitated maintenance through smart maintenance mode and clear, simplified organization of electric and hydraulic compartments.
- Connection to centralized concentrate supply system.



# DIANOVA HD SYSTEM

## Technical Data

### Blood pump and substitution pump

Blood flow rate	0 to 650 mL/min; Accuracy: $\pm 10\%$
Substitution flow rate	0 to 650 mL/min; Accuracy: $\pm 10\%$
Substitution flow range	0 to 39 L/h (HDF online)

### Heparin pump

Heparin pump flow	0 to 10 mL/h; Accuracy: $\pm 0.2$ mL/h
Heparin pump flow resolution	0.1 mL/h
Syringe size	10 mL, 20 mL, 30 mL, 50 mL
Injection rate	10 to 1800 mL/h

### Dialysis fluid and conductivity

Dialysate flow	0, 100 to 1000 mL/min; Accuracy: $< \pm 5\%$
Dialysate flow resolution	1 mL/min
Dialysate temperature	33 to 40°C; Accuracy: $\pm 0.5^\circ\text{C}$
Dialysate conductivity	12.0 to 18.0 mS/cm; Accuracy: $\pm 0.1$ mS/cm

### Ultrafiltration control

UF rate	0 to 6000 mL/h
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### Monitoring system

VP	-700 to 800 mmHg; Accuracy: $\pm 5$ mmHg
AP	-700 to 800 mmHg; Accuracy: $\pm 5$ mmHg
TMP	-700 to 800 mmHg; Accuracy: $\pm 5$ mmHg
Blood leakage monitor	$\geq 0.35$ mL/min (HCT 32%)
Air detector	$\geq 0.02$ mL bubbles or $\geq 0.0003$ mL continuous small bubbles

### Disinfection and cleaning

Rinse	Water / 37°C / 700 mL/min
Hot Rinse	Water / 93°C / 700 mL/min
Decalcification	20% - 30% - 50% Citric Acid / 37°C / 700 mL/min
Thermal disinfection	20% - 30% - 50% Citric Acid / 93°C / 700 mL/min
Chemical disinfection	5% - 10% Sodium Hypochlorite / room temperature / 700 mL/min

### Blood pressure monitoring (Non-Invasive)

Blood pressure range	0 to 300 mmHg
Resolution	1 mmHg
Pulse monitoring range	30 to 220 bpm
Pulse monitoring accuracy	$\pm 3$ bpm

### Dimensions and weight

Dimensions	1460 x 490 x 715 mm
Weight	approx. 85 kg

### Water supply

Pressure	0.5 to 8.0 bar
Temperature	5 to 30 °C

### Power supply

Main voltage	100 to 240 V AC
Frequency	50 to 60 Hz
Back-up battery	40 min

### Running environment

Temperature	10 to 40 °C
Humidity	$\leq 75\%$
Atmospheric pressure	70 kPa to 106 kPa (700 to 1060 mbar)
Protective grade	IPX1
Heater Power	1800 W

