

Features and Benefits of the B|Braun Dialog⁺ Hemodialysis Machine include:

- High Resolution 15" rotating colour touch screen display.
- Designed to fit in small spaces
- Mounted on easily lockable casters that swivel 360°.
- Empty weight is approximately 85 kg.
- Volumetric ultra-filtration control and sequential ultra-filtration (Bergstrom)
- Capable of Acetate and Bicarbonate dialysis
- Automated UF only dialysis
- On-line Hemodiafiltration (HDF) capability
- Dialysis flow rate adjustment from 200 to 1000 mL/min in individual steps of 1 mL instead of pre-defined higher volumes.
- Blood flow rate from 50 to 600 mL/min (8X12 mm blood pump segment) or alternatively 50 to 400 mL/min (7X10 mm blood pump segment)
- Heparin pump for syringes from 10 to 30 mL, programmable infusion.
- Extended dialysis sessions up to 10 hours (e.g. nocturnal treatments) without interruption of treatment.
- Integrated timer on/off for automated disinfections / preparation procedures
- Programmable cleaning and disinfection modes, for chemical, heat, or a combination of chemical/heat disinfection, programmable weekly disinfection table, validated heat-disinfection for citric acid 50% (bactericidal, fungicidal, tuberculocidal, virucidal inactivation including HBV, HCV and HIV)
- Single needle operation as SN click-click mode (requires no specific blood tubing)
- Automated dialyser priming/rinsing program in preparation mode (enabling to flush dialyser after re-use)
- Second clamp for Single Needle operation on the arterial line to avoid recirculation.
- Solcart™ dry bicarbonate cartridge connection – Compatible with Gambro® Bicart.
- Universal blood tubing set. Does not require expensive specific blood tubing sets.
- Automated Blood Pressure Measurement (ABPM), non-invasive by oscillometric method, various programmable measurement cycles.

- Monitors and give visual report on effectiveness of cleaning and disinfection cycles

- Monitors condition of pyrogen filter.

Features of the B|BRAUN DIALOG⁺ that are included in our standard Hemodialysis Machines:

Patient diskette/Magnetic card reader system recognizing all individual patient related dialysis data. This allows for convenient, automated set-up of dialysis treatment prescription parameters. Also, current dialysis treatment data, and history of prior dialysis treatment data for the patient are saved on the disc.

Six profiling options for sodium, bicarbonate, ultra-filtration, temperature, heparin and dialysis flow, all individually programmable in unlimited combination.

Urea clearance assessment (kt/V) during dialysis without the need of any additional propriety disposable supplies.

Automated standby function to save permeate, concentrates and energy in preparation mode; manual activation during treatment.

Integrated technical service mode for easy maintenance and calibration activities, trend-viewer data analysis of dialysis treatment related information and technical parameters (last 20 treatments in the later case); possibility to dispatch information via e-mail for remote diagnosis and trouble shooting support.

BioLogic RR® automated blood pressure stabilization based on blood pressure related ultra-filtration control without the need of any additional propriety disposable supplies. The BioLogic RR is our unique and proven solution for preventing dialysis-induced hypotensive episodes. With BioLogicRR the patient is automatically stabilized during every phase of treatment. This significant improvement in the quality of care translates into increased comfort for you and your patients with less nursing interventions. Ideal for Home and Nocturnal dialysis.

Diacap-Ultra® sterile filter for ultra-pure dialysis fluid.

Sensitivity of the Safety Air Detector - based on ultrasound, air bubbles >50µL, micro foam with cumulated volume. The volume of small air bubbles is accumulated, activating an alarm when a certain volume is reached, depending on the blood pump speed.

Blood Flow through SAD	Alarm Limit for Air
50 ... 200 mL/min	0.2 mL
>200 ... 400 mL/min	0.3 mL
>400 ... 850 mL/min	0.5 mL

The alarm is activated either by one sufficiently large air bubble or by the accumulated volume of many smaller air bubbles.

PBE Sensor measures at arterial inlet of dialyser including bubble catcher; Blood-side pressure increasing in case of dialyser clotting, tube kinked, etc., permanent check of dialyser clotting; nurses get an early signal from the machine (TMP monitoring is not enough) the Dialog automatically sets a warning limit 10 minutes after start. PBE increase does not lead to a TMP increase.

Advantages of the Dialog Balance Chamber Control:

- *Permanent monitoring of the membrane position provides continuous control*
- *No pressure spikes at the dialyser*
- *Smooth UF and prevention of reverse UF at the time of switching.*
- *Continuous dialysate flow even during switching; better therapy results (K^*t/V) by maintaining diffusion pressure.*
- *Protection of the membrane material, valves and pumps; extended machine life.*

Patient disk - safe, easy and with individualized parameters for each patient, automatic therapy optimizing suggestion, easy overview of treatment records for the preceding 6 months.

Unique Options available with B.BRAUN DIALOG + Hemodialysis Machine

Cross-Over double blood pump single needle (highest single needle dialysis therapy available); i.e., two permanently rotating blood pumps for continuous blood flow in the dialyser allowing superior clearances compared to regular, alternating single needle methods.

HDF/HF by substitution bags or On-Line technology with 2 On-Line pyrogen filter (no extra disposable filter required); the On-Line prepared solution is used as substitution fluids and priming/rinsing solution, no requirement of HF and/or NaCl solution bags.

Heat exchanger for incoming and outgoing dialysate fluid.

Battery operation in case of power failure (provides power for 20-25 minutes)

Nexadia™ bi-directional local area networking for central patient monitoring of treatment and machine parameters; interface for connection to clinical information and administration system.

External staff call.

Central concentrate supply to the dialysis machine via a ring main from dialysis concentrate container of 300, 500 or 800 litres.