



PHOENIX ONE PHOENIX ONE DS

WATER TREATMENT SYSTEM FOR DIALYSIS



PHOENIX ONE PHOENIX ONE DS

REVERSE OSMOSIS

Reduced noise system

Total noise level has been reduced to approximately 55 dB.

Redundant construction and manual emergency operation

Continuous permeate production ensured thanks to redundant water booster pumps and manual emergency operation.

Low energy module

Low pressure polyamide membranes, requiring lower energy consumption.

Fully automated module rinsing

Automatic high-flow flush program during the start up process reduces biofouling and blockages.

Use of high-performance synthetic materials

Polyvinylidene fluoride (PVDF) and polypropylene natural (PP-N) piping significantly reduce the formation of biofilms due to their extremely smooth inner surfaces and water-repelling lotus effect.¹

Materials used are corrosion-free and conform to FDA standards and are USP class VI tested.

BCF™ welding technology

Bead and Crevice-Free welding technology (BCF)² allows for a smooth and homogenous connection.

Intelligent water-saving technology

Water-saving technology automatically adjusts the flow to the drain, depending on the rate of permeate consumption. Remote access (optional) enables monitoring of operational parameters.

1. Piping Systems for Dialysis Applications, Georg Fischer

2. BCF is a registered trademark by Georg Fischer.

Optimization of water treatment and costs with Nipro's proactive service

CHOOSE FROM THE FOLLOWING OPTIONS:

Continuous monitoring

- Continuous surveillance, recording, and analysis of monitoring systems for optimal performance.
- Annual quality report based on system parameters and monitoring protocols.

Automatic error messaging

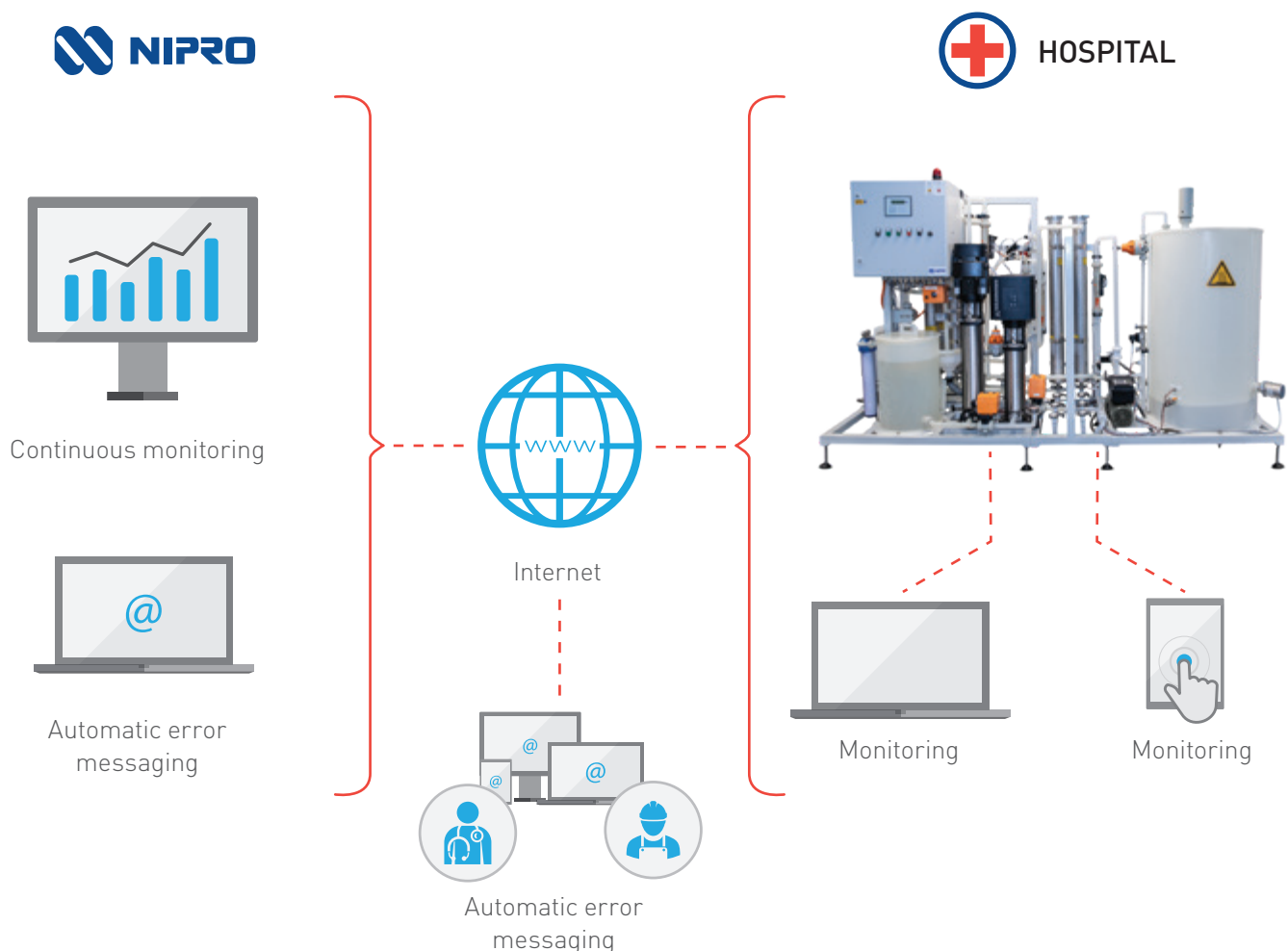
- Email notification on alarms for water treatment or softener are directly sent to our Technical Service or an alternative address.

Cost effective remote access

- Reduced spontaneous service calls.
- Thanks to the connected unit, our Technical Service and authorized personnel can gain access at any time and from any location.

Simple operation

- User interface for direct access by healthcare professionals and dialysis technicians.





SAFE, HYGIENIC, COST EFFECTIVE



Phoenix ONE is a single stage RO, whereas the Phoenix ONE DS is a double stage RO. The double stage RO ensures:

- Full redundancy in case of breakdown of one RO stage. Electronic motor valves facilitate immediate use of the RO stage that is still functioning.
- Higher dialysis water quality than a single stage RO.
- No water waste. Waste water from the second stage gets reused in the first stage.

Phoenix One+ FH / Phoenix One DS+ FH	Phoenix One+ / Phoenix One DS+
Flow heater (FH) disinfection with instant water heater	Hot water disinfection with tank
<ul style="list-style-type: none"> • Heat disinfection of the loop with instant water heater. • Efficient and cost effective disinfection since only the loop is heated. 	<ul style="list-style-type: none"> • Integrated hot water disinfection of the loop and dialysis machine with hot water tank. • Minimized energy consumption, as the permeate is only produced on request instead of continuously stored in the tank.

Technical Specifications

Phoenix One – Single Stage RO

	Phoenix One	Phoenix One+ FH	Phoenix One+
Permeate capacity	700 – 2800 l/h	700 – 2800 l/h	700 – 2800 l/h
Measurements (L x W x H)	1330 x 800 x 1650 1330 x 920 x 1650 (5 modules or more)	1830 x 800 x 1650 1830 x 920 x 1650 (5 modules or more)	2415 x 800 x 1650 2415 x 920 x 1650 (5 modules or more)
Transport weight	260 – 290 kg	290 – 335 kg	320 – 360 kg
Maximum weight in operation	400 kg	450 kg	800 kg (290 kg/m²)
Energy supply	CEE 400 V AC / 50 Hz	CEE 400 V AC / 50 Hz	CEE 400 V AC / 50 Hz
Energy consumption	max. 3.5 kW	max. 16 kW	max. 13 kW
Fuse	3 x automatic circuit breaker K16a	3 x automatic circuit breaker K25a	3 x automatic circuit breaker K25a
Water supply	Potable water, connection G1A	Potable water, connection G1A	Potable water, connection G1A
Drain	HT 50, max. 5 cm clearance above floor level	HT 50, max. 5 cm clearance above floor level	HT 50, max. 5 cm clearance above floor level

Phoenix One DS – Double Stage RO

	Phoenix One DS	Phoenix One DS+ FH	Phoenix One DS+
Permeate capacity	700 – 2800 l/h	700 – 2800 l/h	700 – 2800 l/h
Measurements (L x W x H)	1900 x 950 x 1800 mm	2400 x 950 x 1800 mm	2910 x 950 x 1800 mm
Transport weight	280 – 410 kg	330 – 460 kg	360 – 490 kg
Maximum weight in operation	500 kg	550 kg	800 kg (290 kg/m²)
Energy supply	CEE 400 V AC / 50 Hz / 60 Hz	CEE 400 V AC / 50 Hz / 60 Hz	CEE 400 V AC / 50 Hz / 60 Hz
Energy consumption	max. 7 kW	max. 16 kW	max. 13 kW
Fuse	3 x automatic circuit breaker K16a	3 x automatic circuit breaker K25a	3 x automatic circuit breaker K25a
Water supply	Potable water, connection G1A	Potable water, connection G1A	Potable water, connection G1A
Drain	HT 50, max. 5 cm clearance above floor level	HT 50, max. 5 cm clearance above floor level	HT 50, max. 5 cm clearance above floor level

Water treatment systems of the Phoenix One DS and Phoenix One family are approved as Class IIb medical products in accordance with the Medical Devices Directive 93/42/EEC.

DESIGN

For all of our products, we give special consideration to the consistent use of standard construction components. This ensures a quick and cost effective replacement delivery in case of a malfunction. Special attention is given to construction components that are subject to wear and tear.

PREVENTION

All relevant system parameters are regularly monitored and recorded by means of the Nipro remote monitoring system. Malfunctions can be identified early and the necessary steps can be initiated in a proactive and timely manner (optional).

Regular maintenance and safety controls ensure faultless operation over the long-term.

SUPPORT

Continuous support supplied by our Technical Service.

Your partner for custom installations in dialysis centers

- Reverse osmosis systems
- Hot water disinfection systems (flow heater and tank solutions)
- Permeate ring lines
- Central concentrate supply
- Media supply systems



Nipro Renal Care is part of Nipro Corporation Japan, a leading global healthcare company established in 1954. With over 35.000 employees worldwide, Nipro serves the Medical Device, Pharmaceutical, and Pharmaceutical Packaging industries.

Nipro Renal Care is a global market leader with over 6 decades providing renal solutions for dialysis and dialysis-related treatment. We specialize in developing dialysis machines, water treatment systems, and a comprehensive portfolio of disposable medical equipment.

In order to address the needs of patients, healthcare professionals, and procurement managers alike, Nipro Renal Care is driven by innovation and patient safety to offer the highest quality products that optimize time, effort, and costs.

BECAUSE EVERY LIFE DESERVES AFFORDABLE CARE



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Please contact your local representative for more information.

