

Ultrapure water system



TALOS



The TALOS is a high-performance lab water system, delivering a consistent flow of up to 10 L/min of ultra-pure water that surpasses ASTM, CAP, and NCCLS standards for Type I purity.



TALOS ultra-pure water systems are modular systems designed for the "final treatment" of water that has been pre-treated through purification processes such as reverse osmosis (RO), deionization (DI), or distillation.

These systems produce ultra-pure water that exceeds ASTM Type I standards, ensuring the highest quality.

Advanced coordinated cartridges guarantee consistent and reproducible analytical results.



Features

- ✓ Reliable ultra-pure water quality ASTM Type 1+
- ✓ Easy and economical filter replacement
- ✓ Large, intuitive touchscreen
- ✓ Leak sensor
- ✓ Dry run protection
- ✓ Plug and Use – All consumables and installation accessories included
- ✓ Volume Dispensing
- ✓ Reminder for recommended consumables replacement
- ✓ Alarm history
- ✓ Complete recirculation ensures highest microbial purity
- ✓ Dispensing gun
- ✓ UV unit for maximum microbial purity (mercury-free)
- ✓ Integrated ultrafiltration module for removal of endotoxins and nucleases
- ✓ MADE IN GERMANY



System configuration

- Housing with easily accessible service hood
- Consumable replacement within seconds using quick-connections
- Flow meter for precise volume dosing
- Pressure sensor for monitoring operating pressure and as dry run protection
- Quiet, durable recirculation pump for complete internal recirculation of all media-contacting parts up to withdrawal point.
- Coordinated cartridges protect against impurities in the feed water and ensure reproducible analysis results, high capacity, and low operating costs.
- Three conductivity measuring cells for precise measurement of ultra-pure water and temperature after each treatment cartridge
- Flush valve for complete cleaning of all media-contacting parts as well as adjustable quality flush in standby mode



Various options to adapt to your specific needs:

- Dual-wavelength UV unit for TOC reduction
- Sterile filter 0,2µm
- Wall bracket
- Qualification documents IQ/OQ
- Return line for establishing a ring circuit to the consumers

User Interface

- Large, intuitive touchscreen
- Individual setting options for conductivity display in MΩcm or µS/cm
- Multi-stage conductivity & temperature monitoring for pure & ultrapure water, temperature-compensated with continuous threshold adjustment
- USP-compliant, highly precise measurement with integrated reference resistances and optional temperature compensation deactivation
- Leakage monitoring with error indication and automatic safety shutdown of water supply
- Continuous monitoring of all relevant parameters including early indications of when consumable replacement is required



Feed water requirements

Feed water quality	Pre-treated water (EDI, DI, RO or distilled water)
Conductivity at 25°C	< 100 µS/cm
Total organic carbon (TOC)	< 50 ppb
Inlet pressure*	max. 6 bar
Temperature	5 – 35 °C



Ultrapure water specifications (ASTM type 1)¹:

Resistivity (Conduct.) at 25°C ²	18.2 MΩ.cm (0.055 μS/cm)
Total Organic Carbon ³ (TOC)	≤ 5 ppb (with dual-wavelength UV) ≤ 10 ppb
Particle content ⁴	< 1 /ml
Bacteria	< 0.01 CFU/mL ⁴
Flow rate	Up to 10 L/min

¹ The actual values may vary depending on the nature and concentration of the contaminants in the feed water.

² Conductivity/resistivity can also be displayed non-temperature compensated as required by USP

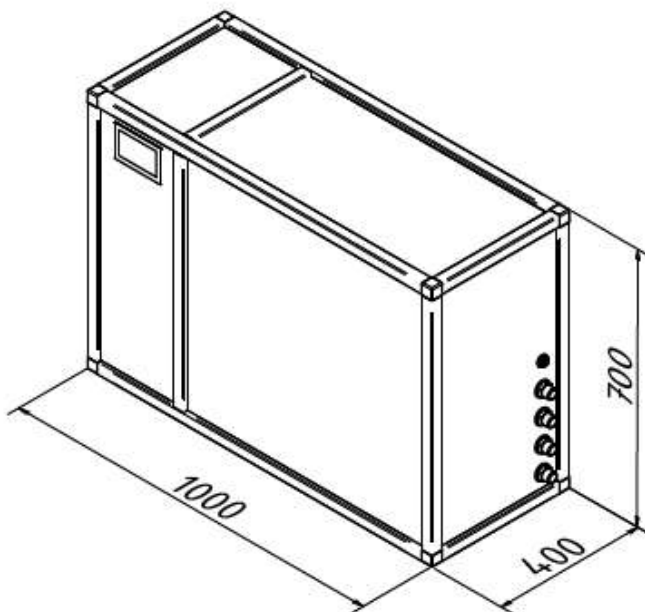
³ In the appropriate operating conditions

⁴ With sterile filter capsule and in the appropriate operating conditions

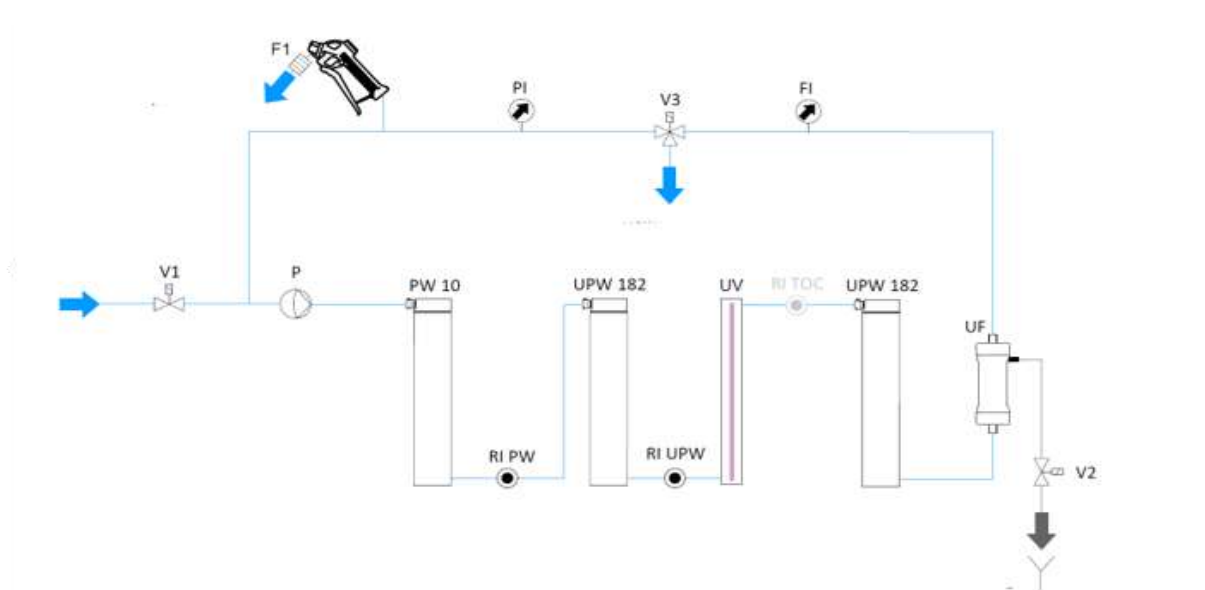
Technical data

Ambient temperature	+2 – 35 °C
Supply voltage	110-240V / 50-60Hz
Connected load	150 W
Connection size	R ¾"

Dimensions



Flow Chart (simplified)



F1:	Sterile filter capsule 0.2µm	RI TOC:	Conductivity cell TOC (optional)	UV:	UV lamp 185/254nm
FI:	Flow meter	RI UPW:	Conductivity cell ultrapure water	V1:	Pressure reducer
P:	Pump	UF:	Ultrafilter (optional)	V2:	Inlet solenoid valve
PW:	TALOS Pure water cartridge	UPW182:	TALOS Ultrapure water cartridge	V3:	Flush solenoid valve
RI PW:	Conductivity cell pure water				

