



TECHNICAL SPECIFICATION

18.2 MΩ·CM WATER

The **ALTO™ I** processes Type 1 water on demand. The system can be fed from a store of pre-purified water or directly from a pressurised Type 2 or Type 3 feed. It features quick-change, long-lasting consumables and TOC monitoring which ensure the highest of purity for your application.

Manufactured to ISO 9001:2015 standard. Certified to IEC 61010-1:2010 and EN 61326-21:2013



FEATURES & BENEFITS

KEY FEATURES

- Type 1 water up to 2 L/min
- Option of remote and/or integrated dispenser
- Intuitive, icon-based, interactive user interface with touch screen
- Mount on-bench, under-bench or on the wall
- Continuous TOC monitoring
- Low Endotoxin, RNase, DNase and Protease option available
- Volumetric and drop by drop dispensing

PRODUCT WATER QUALITY

MODEL	DISPENSE WATER QUALITY (@25 °C / 77 °F)	DISPENSE FLOW RATE	AUTO VOLUMETRIC DISPENSE (@15 °C / 59 °F)	PARTICLES (> 0.2 µm)***	BACTERIA	TOC	ENDOTOXINS***	RNASE***	DNASE***	PROTEASE***
ALTO I	18.2 MΩ·cm	≥ 2 L/min	0.1 - 25 L	< 0.22 / ml	< 0.01 CFU/ml	≤ 5 ppb	< 0.001 EU/mL	< 1 pg/mL	< 5 pg/mL	< 0.15 µg/mL
ALTO I-T	18.2 MΩ·cm	≥ 2 L/min	0.1 - 25 L	< 0.22 / ml	< 0.01 CFU/ml	≤ 5 ppb	< 0.001 EU/mL	< 1 pg/mL	< 5 pg/mL	< 0.15 µg/mL

*** Using correct final filter TC004

SYSTEM REQUIREMENTS

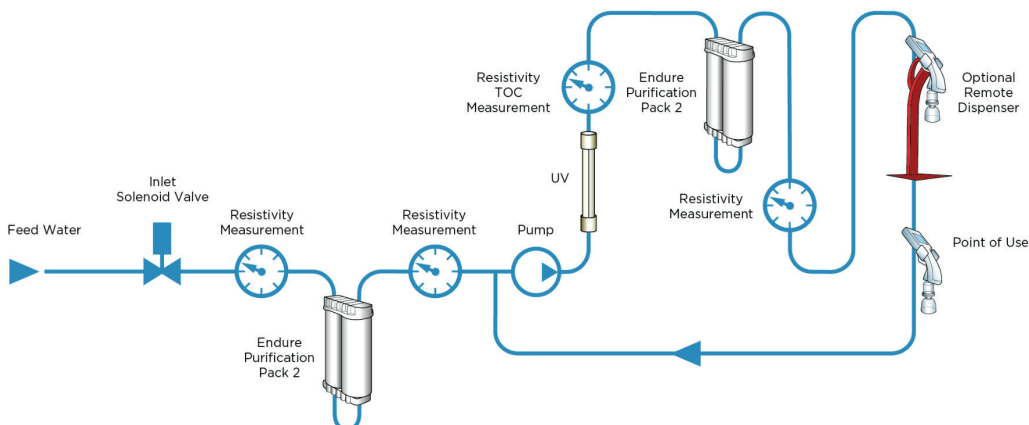
FEED WATER		
Pressure (Alto)	Bar / PSI	1 - 6 / 14.50 - 87
Pressure (Alto I-T)	Bar / PSI	0.1 - 1 / 1.45 - 14.50
Conductivity	µS/cm	< 40
Temperature	°C / °F	4 - 30 / 39.2 - 86
Hardness as CaCO ₃	ppm	< 20
Free Chlorine	ppm	< 2
Colloid Index	SDI	< 3
pH Value	-	4 - 10
Iron (Total Fe)	ppm	< 0.1

UNIT SPECIFICATIONS

ALL MODELS	
Dimensions (HxWxD)	500 x 490 x 290 mm / 19.7 " x 19.3 " x 11.5 "
Dimensions (Remote Dispenser)	640 x 250 x 255 mm / 25.2 " x 9.84 " x 10 "
Installed Weight	23 kg / 50.7 lbs
Power Supply	100 - 240 V - ; 50/60 Hz; 3.0 A (max)
Power Supply Output	24 VDC, 5.0 A, 120 W (max)
Operating Temperature	4 °C - 35 °C (max) / 39.2 °F - 95 °F (max)
Storage Temperature	4 °C - 35 °C (max) / 39.2 °F - 95 °F (max)



FLOWCHART



UTILITIES & SERVICES

REQUIREMENTS

Water Supply	RO, Distilled or Deionised
Drain Type	Sink/Tundish/Standard up-stand with suitable trap
Drain Flow	> 2 L/min

CONSUMABLES & ACCESSORIES

PART NUMBER	DESCRIPTION	TYPICAL ANNUAL REQUIREMENT
TC003	UV Lamp	1
TC004	Final Filter Endotoxin	2*
TC009	Endure™ Purification Pack 2	2
TC010	Sanitisation Pack	1
TC011	Final Filter	2*
AV006	Wall Mounting Kit	-
AV018	IQOQ Documentation for Alto™ I	-
AV053	Remote Dispenser Series 6+	-

* Depending on feed water quality and usage

TYPE 1 WATER

APPLICATIONS

Molecular Biology, Immunology & Pharmacology
 Electrochemistry
 Critical Cell & Tissue Culture
 (GF) AAS, HPLC, IC, ICP-MS, GC, MS
 DNA Sequencing
 Genomics & Proteomics

