Compliance with Quality Assurance demands.

Our products are manufactured in an ISO 9001 and ISO 14001-registered production site and their certificates are available on demand. To assist you in following industry requirements, specific certification documents are also available:

Certificate of Conformity:

The system has been assembled and tested to our stringent Quality Assurance procedures.

Certificates of Calibration:

Included for the built-in resistivity and temperature meters and the A10® TOC monitor.

Certificate of Quality:

Included with all our consumables which have been validated to consistently deliver the water quality expected.

Get instant online access to your certificates of quality at **SigmaAldrich.com/mymilliqconsumables**

Water quality compliance

Ultrapure and pure water produced by the Milli-Q® IQ 7003/05/10/15 system meets or exceeds requirements described by the organizations below:

Organization	Pure water quality / grade	Ultrapure water quality / grade
European Pharmacopoeia	Purified water	Purified water in bulk
U.S. Pharmacopeia	Purified water	Purified water in bulk
Japanese Pharmacopoeia	Purified water	Purified water
Chinese Pharmacopoeia	Purified water	Purified water
ASTM® D1193	Type II water	Type I water, Grade B
ISO 3696	Grade 2 water	Grade 1 water
Chinese National Standard GB/T 6682	Grade 2 water	Grade 1 water
Chinese National Standard GB/T 33087	N/A	Ultrapure water
JIS K 0557	A3 water	A4 water
Clinical and Laboratory Standards Institute® (CLSI®)	N/A	Clinical Laboratory Reagent Water (CLRW)

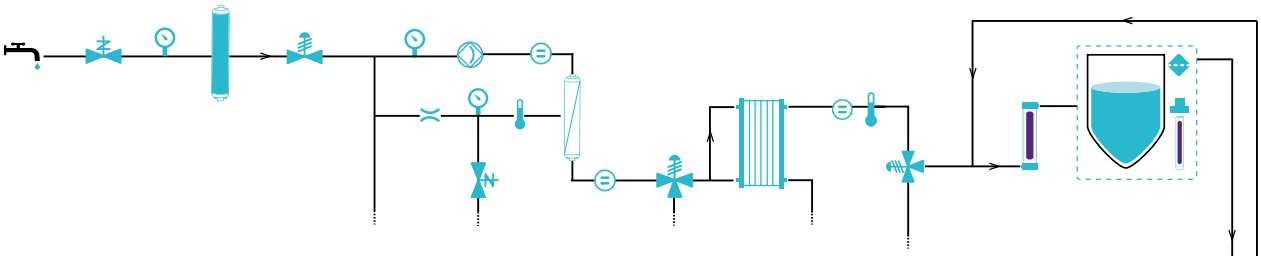
N/A, not applicable.

TECHNICAL APPENDIX

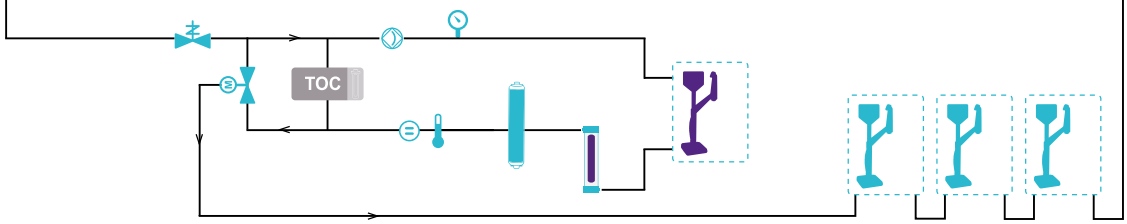
Milli-Q® IQ 7003/05/10/15 Water Purification Systems

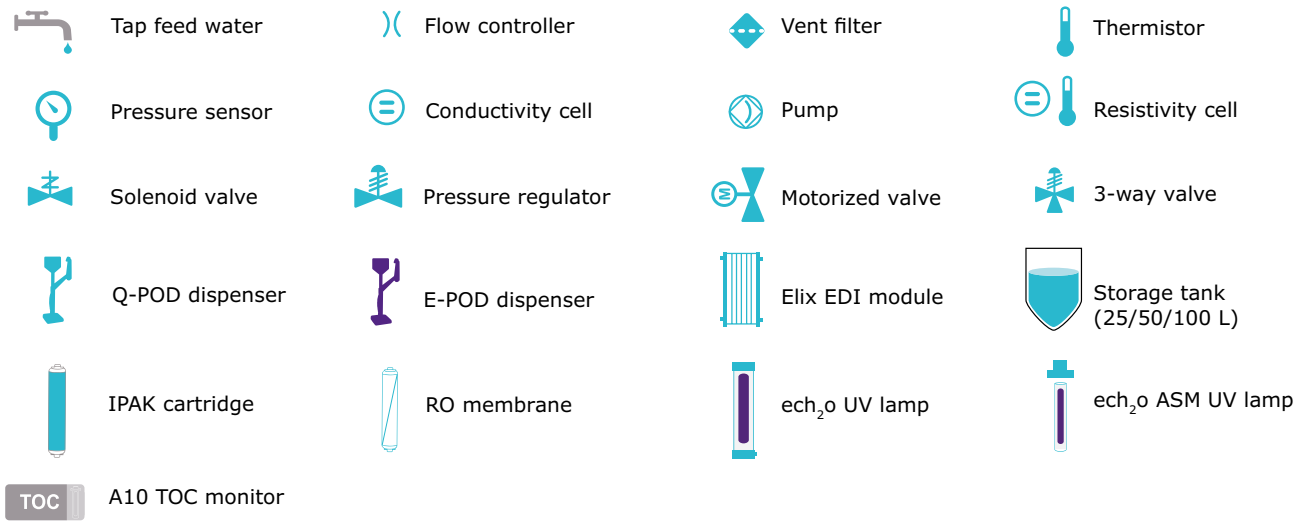
The Milli-Q® IQ 7003/05/10/15 system uses regular* tap water as feed to produce pure (Type 2) and ultrapure (Type 1) water. A pure water storage tank feeds the distribution loop to deliver pure and ultrapure water to independent E-POD® and Q-POD® dispensers, respectively.

Production flow schematic



Distribution flow schematic





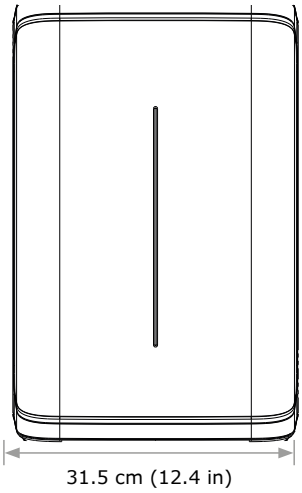
*Potable tap water that meets feed water requirements.

Purification unit and storage tank specifications

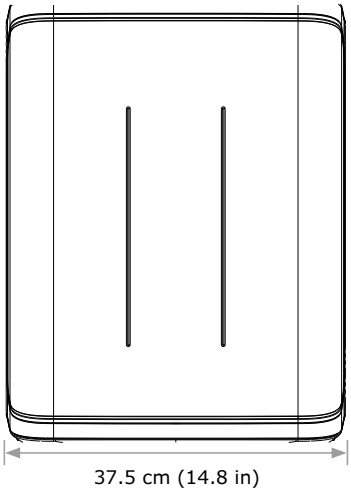
Purification unit

Front view

7003/7005

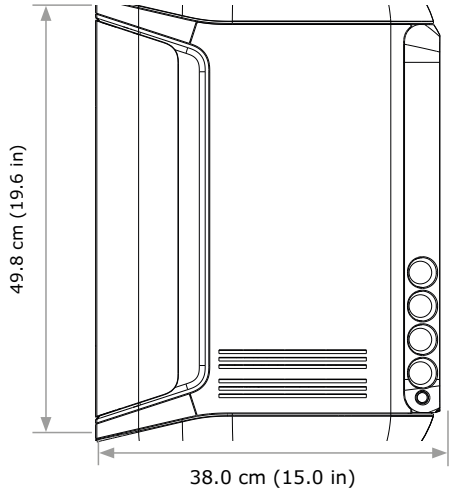


7010/7015



Side view

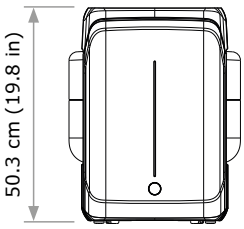
All sizes



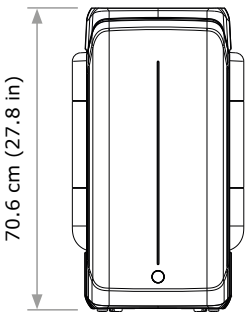
Storage tank

Front view

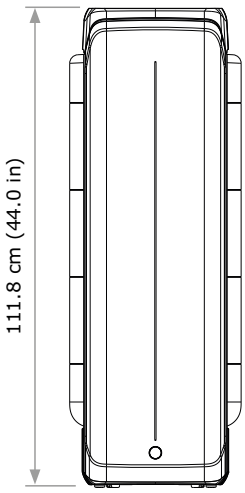
25 L



50 L

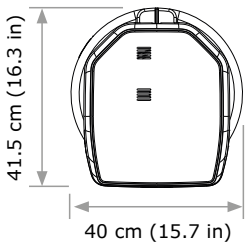


100 L



Top view

All sizes



Tubing and port requirements

Parameter	Description
Feed water connection	½" Gaz
Distance from feed water port	Maximum 5 m (16.4 ft)
Distance from purification unit to POD dispenser	Maximum 5 m (16.4 ft)
Distance from purification unit to tank	Maximum 5 m (16.4 ft)
Power entry	Connection IEC 13
ON/OFF switch	Available on the unit
Water sensor port	Maximum 3.3 VDC
Tank level adapter port	Maximum 5 VDC
Ethernet port	IEEE P802.3

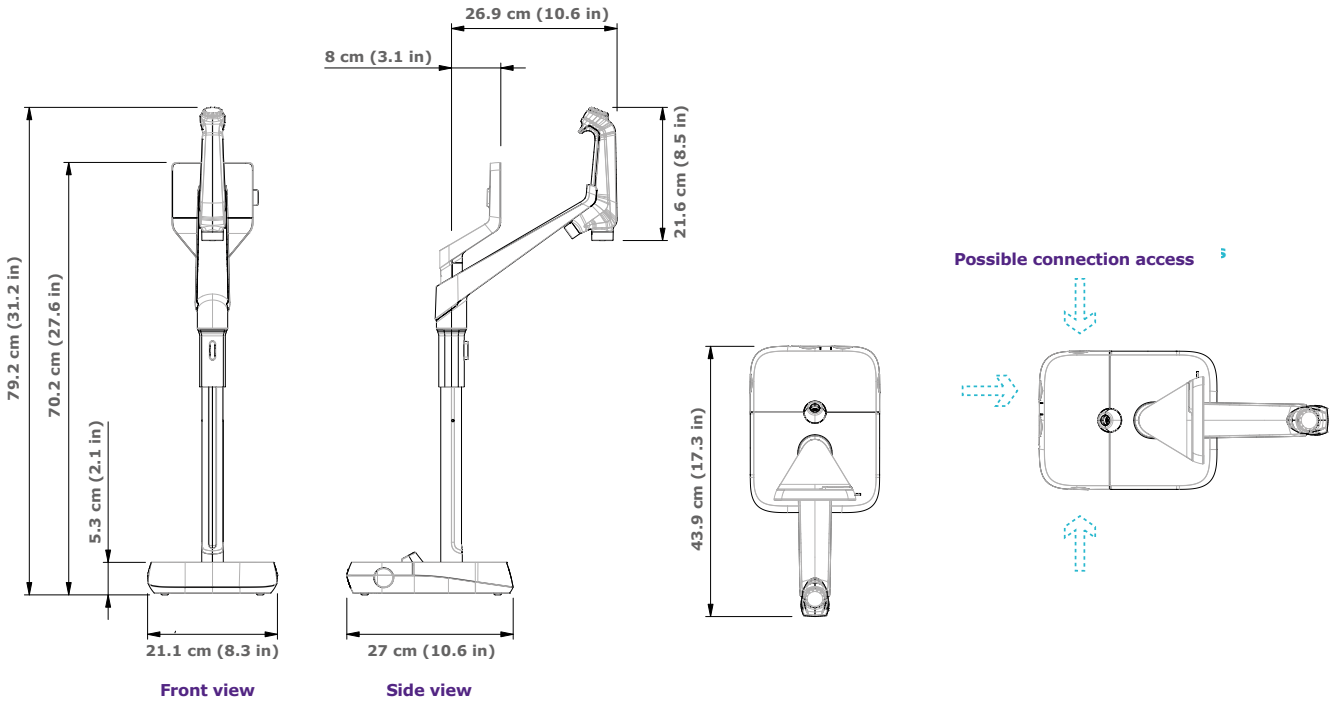
Electrical connections and specifications

Parameter	Description
Power source voltage	100–240 V ± 10%
Power frequency	50–60 Hz ± 10%
Power used	Maximum 600 VA
Power cord length	2.5 m (8.2 ft) plug: IEC13 female
Operational temperature	4–40 °C (39–104 F)
Altitude	Up to 3000 m (9842 ft)
RFID frequency	13.56 MHz
Tank material	High purity polyethylene

Weights

		Dry weight	Shipping weight	Operating weight
Purification unit	7003/7005	21.0 kg (46 lb)	24.0 kg (53 lb)	26.0 kg (57 lb)
	7010	23.7 kg (52 lb)	26.9 kg (59 lb)	29.7 kg (65 lb)
	7015	24.0 kg (53 lb)	27.2 kg (60 lb)	30.0 kg (66 lb)
Storage tank	25 L	6.7 kg (15 lb)	8.5 kg (19 lb)	31.7 kg (70 lb)
	50 L	7.6 kg (17 lb)	10.6 kg (23 lb)	57.6 kg (127 lb)
	100 L	10.9 kg (24 lb)	12.8 kg (28 lb)	110.9 kg (244 lb)

E-POD® and Q-POD® dispenser specifications



Tubing and port requirements

Parameter	Description
Dispenser tubing length	0.92 m (36.22 in)
Distance from purification unit to POD dispenser	Maximum 5 m (16.4 ft)
Distance between two POD dispensers (Maximum 4 dispensers connected in series)	Maximum 5 m (16.4 ft)
POD dispenser data connection with unit	Ethernet
Electrical connection	Powered by purification unit (24–28 VDC)
Foot pedal port	3.3 V

Weights

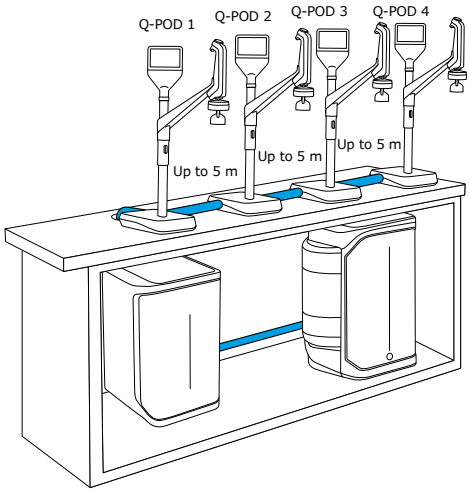
	Dry weight	Shipping weight	Operating weight
Q-POD®/E-POD®	4.7 kg (10.4 lb)	7.2 kg (15.9 lb)	5.5 kg (12.1 lb)

Screen description and functionalities

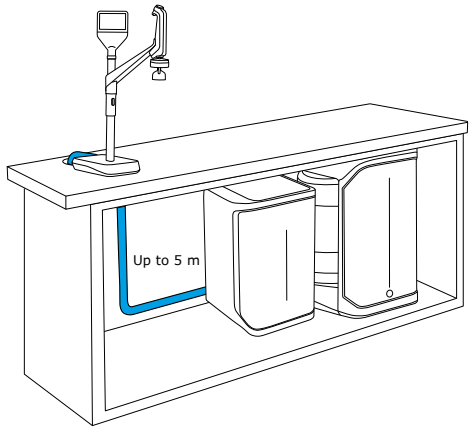
Parameter	Description
Capacitive touchscreen	Size: 5 in; Resolution: 800 x 480
USB port	USB 2.0 Highspeed standard
Speaker	Impedance: 8 Ω/max output power: 0.5 W
Display in 9 languages	Chinese/English/French/German/Italian/Japanese/ Portuguese/Russian/Spanish

Examples of installation options

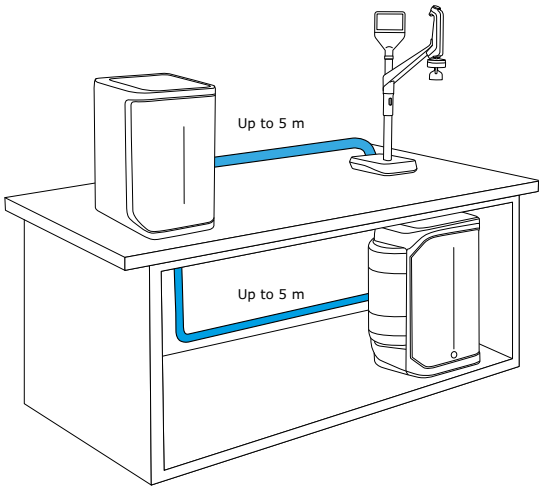




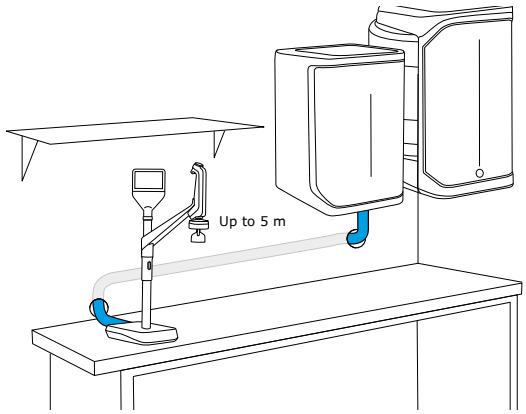
Up to 4 PODs connected



Under-bench installation



Bench-top and under-bench installation



Wall-mounted installation

Water specifications international conformity

Feed water requirements	
Feed water	Potable tap water
Pressure	1–6 bar
Temperature	5–35 °C (41–95 F)
Conductivity	<2000 µS/cm at 25 °C
Dissolved CO_2	<30 ppm
Free chlorine	<3 ppm
Fouling Index	<10
pH	4–10
Total Organic Carbon (TOC)	<2 ppm
Langlier Saturation Index (LSI)	<0.3
Hardness (as $CaCO_3$)	<300 ppm
Silica	<30 ppm

Ultrapure, Type 1 water specifications[1] (from Q-POD® dispenser)	
Resistivity at 25 °C[2]	18.2 MΩ·cm
Conductivity at 25 °C	0.055 µS/cm
TOC	≤2 ppb (µg/L)[3]; typically ≤5 ppb
Particles[4]	No particles with size >0.22 µm
Bacteria[5]	<0.01 cfu/mL (<10 cfu/L)
Pyrogens (endotoxins)[6]	<0.001 EU/mL
RNases[7]	<1 pg/mL
DNases[7]	<5 pg/mL
Proteases[7]	<0.15 µg/mL
Flow rate	Up to 2 L/min

1. These values are typical and may vary depending on the nature and concentration of contaminants in the feed water.
2. Resistivity can also be displayed non-temperature-compensated as required by USP.
3. In the appropriate operating conditions, otherwise typically ≤5 ppb.
4. With Millipak® or Millipak® Gold filter.
5. With Millipak® or Biopak® filter when installed and used in a laminar flow hood.
6. With Biopak® polisher when installed and used in a laminar flow hood.
7. With Biopak® polisher.

Pure, Type 2 water specifications[1]	
Resistivity at 25 °C[2]	>5 MΩ·cm; typically 10–15 MΩ·cm
Conductivity at 25 °C	0.2 µS/cm; typically 0.1 µS/cm
TOC	≤30 ppb
Production flow rate	3 L/h (Milli-Q® IQ 7003) 5 L/h (Milli-Q® IQ 7005) 10 L/h (Milli-Q® IQ 7010) 15 L/h (Milli-Q® IQ 7015)

From an E-POD® dispenser with final filter, the following water quality specifications are achieved:[1]	
Particulates[3]	No particles with size >0.22 µm
Bacteria[4]	<0.01 cfu/mL (<10 cfu/L)
Pyrogens (endotoxins)[5]	<0.001 EU/mL
RNases[6]	<1 pg/mL
DNases[6]	<5 pg/mL
Proteases[6]	<0.15 µg/mL
Flow rate	Up to 2 L/min

1. These values are typical and may vary depending on the nature and concentration of contaminants in the feed water.
2. Resistivity can also be displayed non-temperature-compensated as required by USP.
3. With Millipak® or Millipak® Gold filter.
4. With Millipak® or Biopak® filter when installed and used in a laminar flow hood.
5. With Biopak® polisher when installed and used in a laminar flow hood.
6. With Biopak® polisher.

International regulation requirements

Declaration of CE and cUL Conformity

The Milli-Q® IQ 7003/05/10/15 system has been tested by an independent and accredited company for compliance with CE directives related to safety and electromagnetic compatibility. The report can be consulted on demand. In addition, the Milli-Q® IQ 7003/05/10/15 system is built using components and practices recommended by UL and has been cUL marked.
The registration can be verified on the UL web site: www.ul.com

We also meet the regulatory requirements of the following organizations: