

## Torrent 9000 High Efficiency Purifier



The Torrent 9000 is a compact RO-based (reverse osmosis) water purification system that has been designed to provide 95%+ TDS reduction for demanding applications. It accomplishes this while producing a very small amount of waste water, unlike traditional RO systems. The Torrent 9000 is also a water softener, reducing hardness by 99% without the use of salt.

Due to its proprietary flow path, there is no significant loss of pressure through the system and no repressurization is required.

The availability of on-demand purified water can be customized to the application using the supplied design guide.

### Technical Specifications

Production per day	12,600 USgal	47,600 litres
Real-time production <sup>1</sup>	9 US GPM	34 Lpm
Dimensions	25"W x 30"D x 56"H	64cm W x 75cm D x 142cm H
Dry Weight	335 lbs	152 kg
Electrical requirements	240VAC, 1PH, 10A Nominal, SCCR 5kA	
Feed Pressure	35 – 80 PSI	240 – 550 kPa
Pressure drop, service flow	< 2psi at 20 US GPM	< 14 kpa at 80 Lpm
Maintenance solution capacity (not included)	4.7 USgal (1.5M USgal treatment @ 3ppm)	17.8 Litres (5900m <sup>3</sup> treatment @ 3ppm)

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### Requirements

Feed Water		
Temperature	39 - 82°F	4 - 28°C
Feed water TDS, max <sup>2</sup>	2000 mg/L	
Feed water Hardness, max <sup>2</sup>	85 gpg	1450 mg/L as CaCO <sub>3</sub>
Feed water pressure	35 - 80 PSI	240 - 550 kPa
Turbidity, max	< 0.5 NTU	
SDI, max	< 2.5	
Silica, max	25 mg/L SiO <sub>2</sub>	
Free chlorine/chloramine	< 0.1 mg/L	
Iron, mg/L	Requires pre-treatment	
Manganese		
Hydrogen Sulfide (H <sub>2</sub> S)		
Ambient Temperature	39 - 77°F	4-25°C
Prefilter, particulate	5 micron, 1 micron preferred	

<sup>1</sup> Treatment flow rate is based on 20°C water temperature. Lower water temperature reduces production by approximately 3%/°C below 20°C

<sup>2</sup> For applications exceeding these limits, contact Torrent Water Systems for application-specific assistance.

### Design Guide (direct to use)<sup>3</sup>

Reserve Capacity Requirement	Recommended setup	Reservoir Tank Dimensions (Diam x H)	Reserve capacity	System Footprint (D x W)
< 40 USgal	Single tank	14" x 54"	33 USgal (124L)	28" x 41"
40 - 60 USgal	Single tank	16" x 65"	48 USgal (182L)	28" x 43"
60 - 90 USgal	Dual tank	16" x 65"	96 USgal (366L)	28" x 60"
>90 USgal	Dual tank	18" x 65"	128 USgal (484L)	28" x 65"

<sup>3</sup> For cistern fill applications, an appropriate flow restrictor should be installed to limit the flow rate to storage