



# SHF-140, SHF-180, SHF-290, SHFM-140, SHFM-180, and SHFM-29

Ultraviolet Water Treatment Systems from VIQUA

The **VIQUA PROFESSIONAL family** of compact UV systems provides a reliable and economical way to treat drinking water in virtually any light commercial application.

The high-flow series extends the flow rate range that can be treated using VIQUA's proven and trusted technology. These systems are available with flow rates of up to 290 gpm (65 m<sup>3</sup>/hr) for facilities with higher water demands.



## Features of VIQUA UV water systems

- Capable of inactivating *cryptosporidium*, *giardia*, and *E. coli* in water flows up to 290 gpm (65 m<sup>3</sup>/hr)\*
- Specially designed and tested UV lamps that provide consistent, reliable ultraviolet output over the entire life of the lamp (9,000 hours) to ensure continuous treatment
- Superior quality 316 stainless-steel chamber
- Separate control panel with power isolation
- Visual display of lamp life remaining and audible/visual lamp change reminder
- Specialized 254nm UV intensity sensor with output to enable solenoid valve or remote alarm (available for SHFM models)

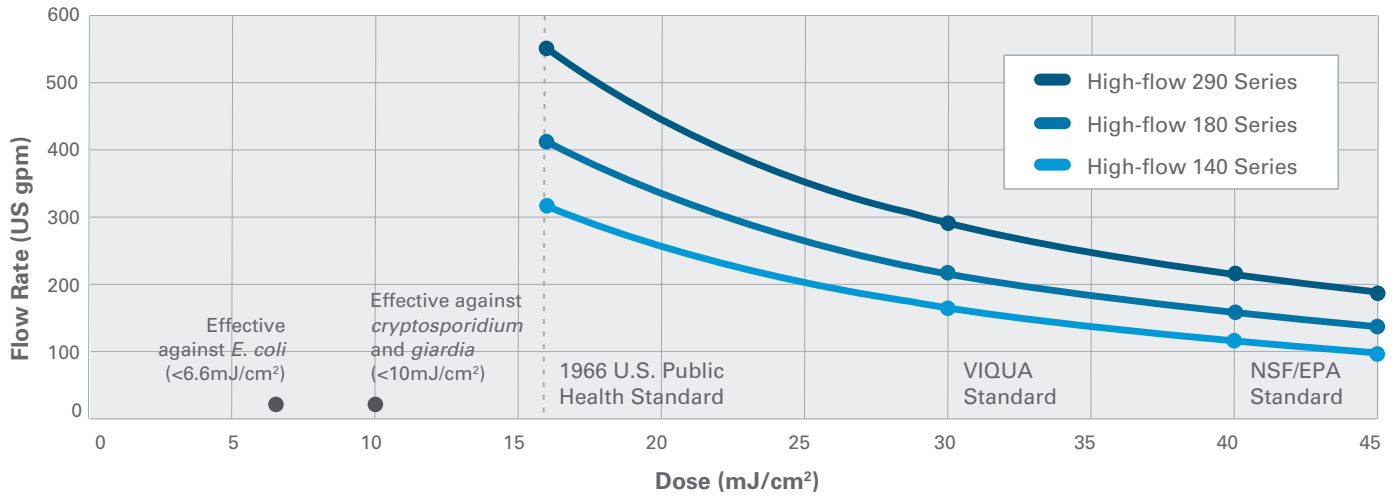
\*Efficacy of VIQUA systems has been demonstrated in internal testing. Visit [VIQUA.com](http://VIQUA.com) for details.



## Specifications

	SHF-140	SHF-180	SHF-290	SHFM-140	SHFM-180	SHFM-290
<b>Model</b>						
North America	SHF-140	SHF-180	SHF-290	SHFM-140	SHFM-190	SHFM-290
EU CEE 7/7	SHF-140/2	SHF-180/2	SHF-290/2	SHFM-140/2	SHFM-190/2	SHFM-290/2
AUS/NZ 3112	SHF-140/2A	SHF-180/2A	SHF-290/2A	SHFM-140/2A	SHFM-190/2A	SHFM-290/2A
UK BS 1363	SHF-140/2B	SHF-180/2B	SHF-290/2B	SHFM-140/2B	SHFM-190/2B	SHFM-290/2B
<b>Flow rates (@ 95% UVT)</b>						
US Public Health (16 mJ/cm <sup>2</sup> )	310 gpm (1170 lpm); 70 m <sup>3</sup> /hr	350 gpm (1300 lpm); 78 m <sup>3</sup> /hr	543 gpm (2055 lpm); 123 m <sup>3</sup> /hr	310 gpm (1300 lpm); 78 m <sup>3</sup> /hr	350 gpm (1300 lpm); 78 m <sup>3</sup> /hr	543 gpm (2055 lpm); 123 m <sup>3</sup> /hr
VIQUA Standard (30 mJ/cm <sup>2</sup> )	170 gpm (640 lpm); 38 m <sup>3</sup> /hr	210 gpm (790 lpm); 47 m <sup>3</sup> /hr	290 gpm (1098 lpm); 65 m <sup>3</sup> /hr	170 gpm (640 lpm); 38 m <sup>3</sup> /hr	210 gpm (790 lpm); 47 m <sup>3</sup> /hr	290 gpm (1098 lpm); 65 m <sup>3</sup> /hr
NSF/EPA (40 mJ/cm <sup>2</sup> )	125 gpm (470 lpm); 28 m <sup>3</sup> /hr	160 gpm (600 lpm); 36 m <sup>3</sup> /hr	215 gpm (813 lpm); 48 m <sup>3</sup> /hr	125 gpm (470 lpm); 28 m <sup>3</sup> /hr	160 gpm (600 lpm); 36 m <sup>3</sup> /hr	215 gpm (813 lpm); 48 m <sup>3</sup> /hr
<b>Dimensions</b>						
Chamber	34 in. x 6 in. x 14 in. (86.4 cm x 15.2 cm x 35.6 cm)	42.5 in. x 6 in. x 14 in. (107.3 cm x 15.2 cm x 35.6 cm)	42.5 in. x 8 in. x 17 in. (108 cm x 20.3 cm x 43.5 cm)	34 in. x 6 in. x 14 in. (86.4 cm x 15.2 cm x 35.6 cm)	42.5 in. x 6 in. x 14 in. (107.3 cm x 15.2 cm x 35.6 cm)	42.5 in. x 8 in. x 17 in. (108 cm x 20.3 cm x 43.5 cm)
Controller	17.5 in. x 19.5 in. x 8.2 in. (44.5 cm x 50 cm x 21 cm)					
Inlet and outlet port size	3-in. flange		4-in. flange	3-in. flange		4-in. flange
Shipping weight	96 lbs (43.5 kg)	99 lbs (45 kg)	286.5 lbs (129.7 kg)	96.5 lbs (43.7 kg)	99.5 lbs (45.1 kg)	287 lbs (130.1 kg)
<b>Electrical</b>						
Voltage	100-240V (50-60 Hz)					
Power consumption	350W	440W	550W	350W	440W	550W
Maximum operating pressure	125 psi (8.62 bar)					
Influent water temperature	2 to 40°C (36 to 104°F)					
Number of lamps	4		5	4		5
<b>Features</b>						
Visual "power on"	Y	Y	Y	Y	Y	Y
Chamber material	316L stainless steel	316L stainless steel	316L stainless steel	316L stainless steel	316L stainless steel	316L stainless steel
Visual lamp life remaining	Y	Y	Y	Y	Y	Y
Audible lamp failure	Y	Y	Y	Y	Y	Y
Audible lamp replacement reminder	Y	Y	Y	Y	Y	Y
UV sensor	N	N	N	Y	Y	Y
Sensor reading output (4-20 mA)	-	-	-	Optional with 260134	Optional with 260134	Optional with 260134
Solenoid valve output	-	-	-	Optional	Optional	Optional

## High-Flow Dose Curves at 95% UVT and 20°C at End of Life



### Replacement parts

**S740RL-4C:** UV lamp for SHF140 and SHFM-140

**QSO-950:** quartz sleeve for SHF-290 and SHFM-290

**S950RL-4C:** UV lamp for SHF-180, SHF-290, SHFM-180, and SHFM-290

**254NM-HF:** UV sensor for SHF-290 and SHFM-290

**QS-012:** quartz sleeve for SHF-140 and SHFM-140

**BA-ICE-HF:** controller for all units

**QS-180:** quartz sleeve for SHF-180 and SHFM-180

**BA-ICE-M-HF:** controller for SHFM-140, SHFM-180, and SHFM-290

### Water quality parameters

**Hardness:** < 7 grains (120 mg/L)

**Iron:** < 0.3 mg/L

**Tannins:** < 0.1 mg/L

To learn more about the VIQUA PROFESSIONAL family and the efficacy of its UV treatment systems, visit [VIQUA.com](https://www.viqua.com)