



AQUATIC ECO-SYSTEMS™

SAFEGUARD UV SYSTEMS™ CLS SERIES

Commercial L-Vessel Stainless Steel

For freshwater applications, our CLS Series SafeGUARD UV Systems 316L Stainless Steel Vessels, with an electropolish finish, provide reliable operation. Vessels are equipped with sensor ports. SafeGUARD UV Systems CLS models are available with LPHO or High-Intensity Amalgam UV Lamps. CLS UV systems provide the benefit of a compact, space-saving design allowing for in-line horizontal or vertical mounting.

CLS Series SafeGUARD UV Systems feature a single-ended glassware assembly, remote NEMA Type 12 thermoplastic power supply enclosure, and are available with Basic or PLC Control packages and either LP HO or Amalgam UV lamps. Available in sizes to treat up to 5,000 GPM (18,925 LPM).

SYSTEM FEATURES:

- Basic Control Package included. (Optional PLC shown)
- Enhanced, state-of-the-art electronic ballast, sized precisely to the lamp's power requirement, ensures optimal UV-C output and maximum useful-lamp-life.
- Compact footprint: reduces required operating space.
- 316L Stainless Steel vessel with an electropolish finish and removable face-plate for internal inspection and cleaning.
- Single-End UV lamp and quartz sleeve access for easy servicing.
- Watertight design protects all electrical hardware from water damage.
- Highest-Quality American-Made Low-Pressure High-Output UV lamps offer 12,000 hours of continuous operation (80% efficient after 12,000 hours).
- Choice of Inlet/Outlet port styles.
- Power Supply is 50/60 Hz capable.
- 6-foot power cord and 20-foot lamp cables.



SAFEGUARD UV SYSTEMS™ HIGH-OUTPUT CLS SERIES

Model	Lamps / Watts	Input Watts	UV-C Output Watts	UV Vessel Dimensions (A x B x C)	Power Enclosure Dimensions (H x W x D)	Inlet / Outlet Port(s) (Flange)	Amps Max Load @ 120/230 VAC	Control Package	Max. PSI / Bar	30 mJ/cm2 GPM / LPM	180 mJ/cm2 GPM / LPM
CLS4160HO6-XXX	2/80	160	54	56" x Ø6" x 47"	14" x 12" x 8.4"	2", 3", 4"	3.0/1.5	Basic or PLC	150 / 10.3	81 / 306	13 / 49
CLS4240HO6-XXX	3/80	240	81	56" x Ø6" x 47"	14" x 12" x 8.4"	2", 3", 4"	4.0/2.0	Basic or PLC	150 / 10.3	115 / 435	19 / 71
CLS4320HO6-XXX	4/80	320	108	56" x Ø6" x 47"	16" x 14" x 8.4"	2", 3", 4"	5.0/2.5	Basic or PLC	150 / 10.3	155 / 586	26 / 98
CLS6300HO6-XXX	2/150	300	114	85" x Ø6" x 76"	14" x 12" x 8.4"	2", 3", 4"	3.75/1.8	Basic or PLC	150 / 10.3	174 / 658	29 / 109
CLS6450HO6-XXX	3/150	450	171	85" x Ø6" x 76"	14" x 12" x 8.4"	2", 3", 4"	5.5/2.7	Basic or PLC	150 / 10.3	250 / 946	41 / 155
CLS6600HO6-XXX	4/150	600	228	85" x Ø6" x 76"	16" x 14" x 8.4"	2", 3", 4"	7.5/3.7	Basic or PLC	150 / 10.3	331 / 1,252	55 / 208

SAFEGUARD UV SYSTEMS AMALGAM CLS SERIES

Model	Lamps / Watts	Input Watts	UV-C Output Watts	UV Vessel Dimensions (A x B x C)	Power Enclosure Dimensions (H x W x D)	Inlet / Outlet Port(s) (Flange)	Amps Max Load @ 120/230 VAC	Control Package	Max. PSI / Bar	30 mJ/cm2 GPM / LPM	180 mJ/cm2 GPM / LPM
CLS4130A6-XXX	1/130	130	40	56" x Ø6" x 47"	16" x 14" x 8.4"	2", 3", 4"	2.1/1.0	Basic or PLC	150 / 10.3	66 / 249	11 / 41
CLS4260A6-XXX	2/130	260	80	56" x Ø6" x 47"	16" x 14" x 8.4"	2", 3", 4"	3.9/2.0	Basic or PLC	150 / 10.3	112 / 423	18 / 68
CLS4390A6-XXX	3/130	390	120	56" x Ø6" x 47"	16" x 14" x 8.4"	2", 3", 4"	5.8/2.9	Basic or PLC	150 / 10.3	161 / 609	27 / 102
CLS4390A8-XXX	3/130	390	120	62" x Ø8" x 51"	16" x 14" x 8.4"	3", 4" 6"	5.8/2.9	Basic or PLC	150 / 10.3	228 / 863	38 / 143
CLS4520A8-XXX	4/130	520	160	62" x Ø8" x 51"	20.2" x 16.3" x 8.4"	3", 4" 6"	7.5/3.7	Basic or PLC	150 / 10.3	296 / 1,120	49 / 185
CLS4650A8-XXX	5/130	650	200	62" x Ø8" x 51"	24.6" x 20.2" x 10.6"	3", 4" 6"	9.4/4.7	Basic or PLC	150 / 10.3	346 / 1,309	57 / 215
CLS4780A10-XXX	6/130	780	240	64" x Ø10" x 51"	24.6" x 20.2" x 10.6"	4", 6", 8"	11.2/5.6	Basic or PLC	150 / 10.3	480 / 1,816	80 / 302
CLS4910A10-XXX	7/130	910	280	64" x Ø10" x 51"	24.6" x 20.2" x 10.6"	4", 6", 8"	13.3/6.5	Basic or PLC	150 / 10.3	564 / 2,134	94 / 355
CLS4910A12-XXX	7/130	910	280	69" x Ø12" x 51"	24.6" x 20.2" x 10.6"	6", 8", 10"	13.3/6.5	Basic or PLC	150 / 10.3	648 / 2,452	108 / 408
CLS41040A12-XXX	8/130	1,040	320	69" x Ø12" x 51"	30.5" x 24.1" x 12.6"	6", 8", 10"	15.0/7.5	Basic or PLC	150 / 10.3	763 / 2,888	127 / 480

CLS6320A6-XXX	1/320	320	98	85" x Ø6" x 76"	24.6" x 20.2" x 10.6"	2", 3", 4"	3.2/1.6	Basic or PLC	150 / 10.3	165 / 624	27 / 102
CLS6640A6-XXX	2/320	640	196	85" x Ø6" x 76"	24.6" x 20.2" x 10.6"	2", 3", 4"	6.0/3.0	Basic or PLC	150 / 10.3	276 / 1,044	46 / 174
CLS6960A6-XXX	3/320	960	294	85" x Ø6" x 76"	24.6" x 20.2" x 10.6"	2", 3", 4"	9.0/4.5	Basic or PLC	150 / 10.3	392 / 1,483	65 / 246
CLS6960A8-XXX	3/320	960	294	86" x Ø8" x 76"	24.6" x 20.2" x 10.6"	3", 4" 6"	9.0/4.5	Basic or PLC	150 / 10.3	587 / 2,222	98 / 370
CLS61280A8-XXX	4/320	1,280	392	86" x Ø8" x 76"	24.6" x 20.2" x 10.6"	3", 4" 6"	12.0/6.0	Basic or PLC	150 / 10.3	744 / 2,816	124 / 469
CLS61600A8-XXX	5/320	1,600	490	86" x Ø8" x 76"	24.6" x 20.2" x 10.6"	3", 4" 6"	15.0/7.5	Basic or PLC	150 / 10.3	848 / 3,210	141 / 533
CLS61920A10-XXX	6/320	1,920	588	88" x Ø10" x 76"	30.5" x 24.1" x 12.6"	4", 6", 8"	18.0/9.0	Basic or PLC	150 / 10.3	1,198 / 4,534	199 / 753
CLS62240A10-XXX	7/320	2,240	686	88" x Ø10" x 76"	30.5" x 24.1" x 12.6"	4", 6", 8"	230 VAC/ 11 AMPS	Basic or PLC	150 / 10.3	1,405 / 5,318	234 / 885
CLS62240A12-XXX	7/320	2,240	686	90" x Ø12" x 76"	30.5" x 24.1" x 12.6"	6", 8", 10"	230 VAC/ 11 AMPS	Basic or PLC	150 / 10.3	1,611 / 6,098	268 / 1,014
CLS62560A12-XXX	8/320	2,560	784	90" x Ø12" x 76"	30.5" x 24.1" x 12.6"	6", 8", 10"	230 VAC/ 13 AMPS	Basic or PLC	150 / 10.3	1,839 / 6,961	306 / 1,158
CLS62880A14-XXX	9/320	2,880	882	92" x Ø14" x 76"	30.5" x 24.1" x 12.6"	8", 10", 12"	230 VAC/ 14 AMPS	Basic or PLC	130 / 8.9	2,183 / 8,263	364 / 1,377
CLS63200A16-XXX	10/320	3,200	980	94" x Ø16" x 76"	30.5" x 24.1" x 12.6"	10", 12", 14"	230 VAC/ 16 AMPS	Basic or PLC	100 / 6.8	2,544 / 9,630	424 / 1,605
CLS63520A18-XXX	11/320	3,520	1,078	96" x Ø18" x 76"	40.4" x 32.5" x 12.6"	12", 14", 16"	230 VAC/ 17 AMPS	Basic or PLC	80 / 5.5	2,904 / 10,992	484 / 1,832
CLS63840A20-XXX	12/320	3,840	1,176	98" x Ø20" x 76"	40.4" x 32.5" x 12.6"	14", 16", 18"	230 VAC/ 19 AMPS	Basic or PLC	65 / 4.4	3,434 / 12,999	572 / 2,165
CLS64160A24-XXX	13/320	4,160	1,274	102" x Ø24" x 76"	40.4" x 32.5" x 12.6"	16", 18", 20"	230 VAC/ 20 AMPS	Basic or PLC	50 / 3.4	3,821 / 14,464	636 / 2,407

Note: Model Number Matrix Example CLS4160HO6-XXX: **CLS 4 160 HO 6 2F B**

CLS - Model Family / **4** - UV Vessel Length / **160** - Input Watts / **HO** - UV Lamp Style / **6** - Vessel Diameter / **2F** - Port Size & Style / **B** - Control Package (**"B"** = Basic or **"P"** = PLC)

Note: Fluence (UV Dose) calculated using UVT factors of 90-95%T and UV lamps at the end of their useful lamp life

Note: Available with PLC Monitor/Controls

Note: NSF Certified UV Vessel Pressure rated

Note: Other port sizes may be available - please call for assistance

Note: UV System customization may change Vessel and or Power Enclosure dimensions

Note: UV Vessel Dimensions: A = Length of UV Vessel, B = Diameter of UV Vessel, C = Clearance needed for Quartz Sleeve Removal

Note: All models are weather-tight and 508A UL Listed



AQUATIC ECO-SYSTEMS™

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