

# UV A Series



Ultraviolet (UV) Water Sterilizers are a world renowned and proven form of water disinfection within all forms of the water treatment industry. UV is a simple, rapid, economical and efficient method of water disinfection without the use of heat or dangerous chemicals. UV does not leave residual taste or odour in the water supply like other forms of disinfection treatment. UV uses 254nm Ultraviolet light to quickly and reliably disable bacteria, viruses and other micro organisms present in the water supply.

The **A Series** has been designed for Commercial and Industrial applications for high demand continuous flow rates or in conjunction with higher water temperatures. Amalgam UV System have proven to produce lower equipment running costs due to running less lamps over multiple standard germicidal lamps plus have a smaller footprint.

**The A Series** systems come complete with reactor chamber, US made Amalgam low pressure lamps, quartz sleeves, Viton O-Rings and a purpose built mounted control box (or optional free standing control box). Features include: On/Off switch, Fan cooling, lamp on status indicators, hour run meter, instant start electronic ballast with LED alarm/dry contact, overheating protection and external fuse. The reactor chambers are manufactured from high quality, 3mm thick, 304 or 316L, electro-chemically passivated and hand polished stainless steel with UV optical/sensor port (for optional UVT monitoring) and Drain Port.

*Pre-filtration may be required depending on the raw water quality.*



## **Benefits**

- ◆ Designed to operate at higher temperatures
- ◆ Fast, Efficient Disinfection at High Flow rates
- ◆ High Quality SS Reactor Chamber
- ◆ Lower Equipment Running Costs
- ◆ Less Lamps required than Standard Low Pressure Lamps = (smaller footprint)
- ◆ Achieve Up to 10 x UV Power density than standard low pressure lamps
- ◆ Shorter Warm up times
- ◆ No Chemicals
- ◆ Environmentally Friendly

## **Applications**

- ◆ Commercial Potable Water
- ◆ Industrial Water Supplies
- ◆ Process Water
- ◆ Food and Beverage
- ◆ Hotels and Restaurants
- ◆ Health Clinics and Hospitals
- ◆ Aquaculture
- ◆ Cooling Towers
- ◆ Mine Site and Construction Camps
- ◆ Laboratories and Pharmaceutical

## Series A specifications

Model  Specifications	Flow Rate		Flow Rate		Flow Rate		Lamp No.	Length of Quartz (mm)	Chamber size(mm)			
	UVT 90% (30mj/cm <sup>2</sup> )		UVT 96% (30mj/cm <sup>2</sup> )		UVT 80% (40mj/cm <sup>2</sup> )				L1	L2	W1	W2
	LPH	Inlet/Outlet Size	LPH	Inlet/Outlet Size	LPH	Inlet/Outlet Size						
A-14200C	25,500	2.5"Flange	31,000	2.5"Flange	13,700	1.5"Flange	420065	1205	700	1427	140	200
A-24200C	44,000	3"Flange	54,500	4"Flange	23,700	2"Flange	420065	1205	700	1427	140	200
A-24200iC	51,800	4"Flange	70,500	4"Flange	25,550	2.5"Flange	420065	1205	700	1427	155	230
A-34200C	82,000	5"Flange	111,000	5"Flange	40,000	3"Flange	420065	1205	700	1427	155	230
A-44200C	126,000	6"Flange	179,000	8"Flange	59,000	4"Flange	420065	1205	700	1427	190	286
A-54200C	183,000	8"Flange	275,000	8"Flange	80,000	5"Flange	420065	1205	700	1487	230	340
A-64200C	210,000	8"Flange	315,000	8"Flange	92,000	5"Flange	420065	1205	700	1487	230	340
A-64200iC	230,000	8"Flange	365,000	10"Flange	97,000	5"Flange	420065	1205	700	1487	298	450
A-74200C	265,000	8"Flange	425,000	10"Flange	113,000	5"Flange	420065	1205	700	1487	298	450
A-84200C	297,000	8"Flange	495,000	10"Flange	125,000	6"Flange	420065	1205	700	1487	320	460

A-12225C	28,000	2.5"Flange	34,000	2.5"Flange	15,000	1.5"Flange	222564	1205	700	1427	140	200
A-22225C	48,000	3"Flange	60,000	4"Flange	25,500	2.5"Flange	222564	1205	700	1427	140	200
A-22225iC	57,000	4"Flange	77,500	5"Flange	27,800	2.5"Flange	222564	1205	700	1427	155	230
A-32225C	89,000	5"Flange	119,000	6"Flange	44,000	3"Flange	222564	1205	700	1427	155	230
A-42225C	138,000	6"Flange	195,000	8"Flange	64,000	4"Flange	222564	1205	700	1427	190	286
A-52225C	200,000	8"Flange	300,000	8"Flange	88,000	5"Flange	222564	1205	700	1487	230	340
A-62225C	230,000	8"Flange	345,000	10"Flange	100,000	5"Flange	222564	1205	700	1487	230	340
A-62225iC	250,000	8"Flange	400,000	10"Flange	106,000	5"Flange	222564	1205	700	1487	298	450
A-72225C	290,000	8"Flange	465,000	10"Flange	123,000	6"Flange	222564	1205	700	1487	298	450
A-82225C	330,000	10"Flange	545,000	12"Flange	135,000	6"Flange	222564	1205	700	1487	320	460

A-14240C	34,000	2.5"Flange	41,000	3"Flange	20,000	2.5"Flange	424064	1625	1000	1842	140	200
A-24240C	69,000	4"Flange	93,000	5"Flange	33,800	3"Flange	424064	1625	1000	1842	155	230
A-34240C	107,000	5"Flange	145,000	6"Flange	53,000	4"Flange	424064	1625	1000	1842	155	230
A-44240C	167,000	8"Flange	238,000	8"Flange	78,000	5"Flange	424064	1625	1000	1842	190	286
A-54240C	207,000	8"Flange	295,000	8"Flange	97,000	6"Flange	424064	1625	1000	1902	230	340
A-64240C	275,000	8"Flange	415,000	10"Flange	123,000	8"Flange	424064	1625	1000	1902	230	340
A-74240C	320,000	10"Flange	475,000	10"Flange	142,000	8"Flange	424064	1625	1000	1902	230	340
A-84240C	405,000	10"Flange	650,000	12"Flange	172,000	8"Flange	424064	1625	1000	1902	298	450
A-94240C	455,000	10"Flange	725,000	14"Flange	193,000	8"Flange	424064	1625	1000	1902	298	450
A-104240C	535,000	12"Flange	885,000	14"Flange	220,000	10"Flange	424064	1625	1000	1902	320	460

A-12320C	41,500	3"Flange	51,000	4"Flange	22,500	2"Flange	232064	1625	1000	1842	140	200
A-22320C	85,000	5"Flange	115,000	5"Flange	42,000	3"Flange	232064	1625	1000	1842	155	230
A-32320C	158,000	6"Flange	223,000	8"Flange	73,000	4"Flange	232064	1625	1000	1842	190	286
A-42320C	207,000	8"Flange	293,000	8"Flange	96,000	5"Flange	232064	1625	1000	1842	190	286
A-52320C	278,000	8"Flange	415,000	10"Flange	125,000	6"Flange	232064	1625	1100	1902	230	340
A-62320C	340,000	10"Flange	—	—	152,000	6"Flange	232064	1625	1100	1902	230	340
A-72320C	445,000	10"Flange	710,000	14"Flange	187,000	8"Flange	232064	1625	1100	1902	298	450
A-82320C	500,000	12"Flange	810,000	14"Flange	212,000	8"Flange	232064	1625	1100	1902	298	450
A-92320C	560,000	12"Flange	910,000	14"Flange	238,000	8"Flange	232064	1625	1100	1902	298	450
A-10320C	610,000	12"Flange	—	—	258,000	8"Flange	232064	1625	1100	1902	298	450
A-112320C	660,000	12"Flange	1100,000	16"Flange	280,000	8"Flange	232064	1625	1100	1902	320	460
A-122320C	725,000	14"Flange	1200,000	16"Flange	308,000	8"Flange	232064	1625	1000	1902	320	460
A-132320C	790,000	14"Flange	—	—	335,000	10"Flange	232064	1625	1000	1902	320	460
A-142320C	895,000	14"Flange	1530,000	18"Flange	368,000	10"Flange	232064	1625	1000	1902	340	500
A-152320C	950,000	16"Flange	—	—	400,000	10"Flange	232064	1625	1000	1902	340	500

## Operational Requirements

The UV System requires minimum water quality for correct disinfection. If the raw water supply does not meet the following minimum requirements pre-treatment must be considered.

- **Turbidity (Suspended Solids):** < 1 NTU  
*Minimum of 5 mic. sediment filtration recommended)*
- **Chloride (Cl):** <250mg
- **Hardness (CaCo3):** <120mg/L
- **Iron (Fe):** <0.3mg/L
- **Manganese (Mn):** <0.05
- **Recommended Ambient & Water temperature:** 2°C - 85°C (35°F - 185°F)
- **Maximum recommended operating pressure:** 690kPa (100psi)
- **Power requirements:** 240V AC 10amp

