



IH-12L
315 GPM

IDEAL HORIZONS engineers models for Germicidal, Ozone, T.O.C. reduction, make-up, process, product, reclaim, and discharge water systems. Fresh water and high purity water flow rates range from 10 GPM to 1,260 GPM.

All models are designed with user friendly features and the flexibility of interchangeable designs to meet specific application requirements. Standard electrical enclosures that are normally mounted on the unit can be easily removed and relocated for a remote version.

Ideal Horizons is committed to designing innovative solutions today to protect tomorrow's environment.

DISINFECTION CHAMBER CONSTRUCTION DESIGN

- Disinfection chamber constructed of 316L S.S. on all wetted parts.
- All wetted parts have fusion welds with full penetration, purged with inert argon gas, and radii ground smooth.
- Pickle, passivate, and electropolish interior and exterior of disinfection chamber surfaces to MIL. SPEC. S-5002, after fabrication.
- Flange end plates with removeable heads allow access to interior vessel surfaces for start-up and future operations inspections.

ELECTRICAL

- All wiring is color coded and numbered with quick disconnects on major assemblies.
- Ballast and instrument enclosure integral to the disinfection chamber. NOTE: The remote series units have a remote enclosure separate from the disinfection chamber with 10 feet of interconnecting flexible sealtight conduit.
- Enclosures for IH-1S thru IH-4L are NEMA 3R rated and modified.
- Enclosures for IH-8S thru IH-48L are NEMA 4X rated, 304 stainless steel, fan cooled and modified.

ULTRAVIOLET LAMPS AND QUARTZ

- Ultraviolet lamps are low pressure mercury vapor type with hard glass enclosure.
- Ultraviolet lamp sockets are watertight and vibration resistant.
- Quartz sleeve design will allow minimum 95% UV transmission.

INSTRUMENTATION

- Elapsed running time meter, nonresettable to 99,999 hours.
- L.E.D. operational display panel for visual indication of the ultraviolet lamp operations. The L.E.D. display will provide a visual indication of individual lamp on/off status.

OPTIONAL EQUIPMENT

- **Narrow Band Ultraviolet Meter:** This instrument will provide a continuous visual readout of the ultraviolet transmission levels starting from the ultraviolet lamps through the liquid to the photo sensor located in the chamber wall. UV lamp failure, build-up of material on the quartz sleeve, or drop in the incoming water quality will register on the meter. This meter is pre-set at our factory with a low level alarm should the transmission drop for any of the above reasons. This is designed to insure a minimum of 30,000 μW seconds per cm^2 throughout the ultraviolet chamber.
- **Thermistor Overheat Safety Control:** Designed for conditions where there is the possibility of no flow for extended periods. This instrument will measure the internal liquid temperature of the disinfection chamber. Should the temperature rise above 100 degrees F, the unit will automatically shutdown preventing any possible electrical failure that would be caused by heat build up. Once the temperature drops to acceptable levels, the ultraviolet unit will restart and function normally.
- **Sanitary Fittings:** Designed for pharmaceutical and applications where requirements call for tri-clamp inlet and outlets.
- **Wiper Systems:** Manual or automatic quartz cleaning systems to insure proper UV transmissions.
- **NEMA 4X 304** Stainless Steel electrical enclosure available for models IH-1S thru IH-4L.

Models IH-1S through IH-4L incorporate 316L S.S. disinfection chambers mounted integral to the NEMA 3R rated electrical box. Utilization of quality components along with compact configurations provide flow rates up to 100 GPM.

IH-2S 20 - 30 GPM



IH-24L 630 GPM



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PERFORMANCE AND DOSAGE

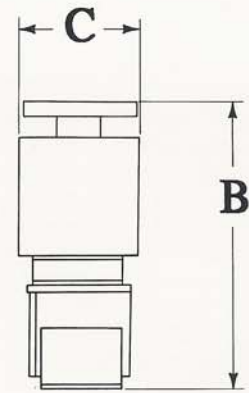
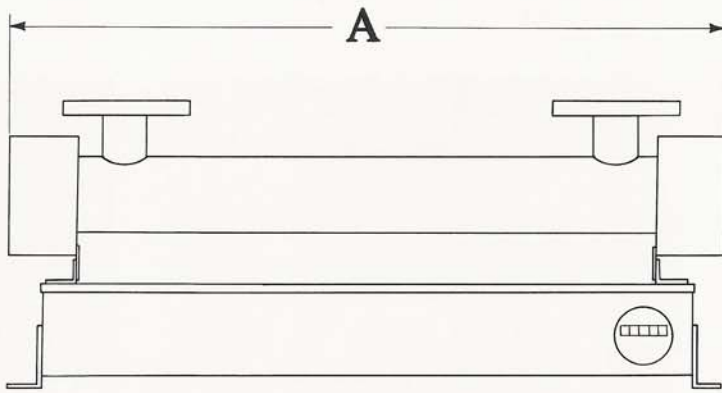
- Ultraviolet disinfection unit shall have over a 99.9% bacterial reduction from inlet to outlet. Ultraviolet dosage to be 30,000 μw seconds per cm^2 minimum at rated flow.
- T.O.C. reduction units are specifically designed for higher U.V. dosage per customer requirements.



MODELS	INLET/OUTLET SIZE	MAXIMUM CAPACITY FOR				NUMBER OF LAMPS	ELECTRICAL		ELECTRICAL ENCLOSURE	OPERATING PRESSURE	
		CLEAR FRESH WATER		DI, RO WATER			AMP	KW		PSI	ATMOS
		GPM	m ³ H	GPM	m ³ H						
IH-1S	1" NPT	10	2	15	3	1	.6	.07	NEMA 3R	125	9.0
IH-2S	1½" NPT	20	4	30	6	2	1.3	.16	NEMA 3R	125	9.0
IH-2L	2" FLANGE	40	9	50	11	2	2.1	.26	NEMA 3R	125	9.0
IH-4S	2" FLANGE	40	9	50	11	4	2.1	.26	NEMA 3R	125	9.0
IH-4L	2" FLANGE	80	18	100	23	4	3.2	.38	NEMA 3R	125	9.0
IH-8S	3" FLANGE	80	18	100	23	8	4.2	.52	NEMA 4X 304 SS	150	11.0
IH-10S	3" FLANGE	100	23	125	28	10	5.4	.65	NEMA 4X 304 SS	150	11.0
IH-12S	3" FLANGE	130	30	156	36	12	6.5	.77	NEMA 4X 304 SS	150	11.0
IH-8L	4" FLANGE	165	37.5	200	45	8	6.4	.76	NEMA 4X 304 SS	150	11.0
IH-10L	4" FLANGE	215	49	260	59	10	7.5	.90	NEMA 4X 304 SS	150	11.0
IH-12L	4" FLANGE	250	57	315	72	12	9.6	1.1	NEMA 4X 304 SS	150	11.0
IH-24S	4" FLANGE	250	57	315	72	24	13.0	1.5	NEMA 4X 304 SS	150	11.0
IH-16L	4" FLANGE	330	75	400	90	16	12.8	1.5	NEMA 4X 304 SS	150	11.0
IH-20L	4" FLANGE	430	98	520	118	20	15.0	1.8	NEMA 4X 304 SS	150	11.0
IH-24L	4" FLANGE	500	114	630	143	24	19.2	2.2	NEMA 4X 304 SS	150	11.0
IH-32L	6" FLANGE	660	150	800	180	32	25.6	3.0	NEMA 4X 304 SS	150	11.0
IH-40L	6" FLANGE	860	196	1,040	236	40	30.0	3.6	NEMA 4X 304 SS	150	11.0
IH-48L	6" FLANGE	1,000	230	1,260	286	48	38.4	4.4	NEMA 4X 304 SS	150	11.0

See Equipment Specifications List for All Standard Features

MODEL No's IH-1S thru IH-4L



MODEL NUMBER	OVERALL DIMENSIONS						SHIPPING WEIGHT	
	A		B		C		Lbs	Kg
	Inches	cm	Inches	cm	Inches	cm		
IH-1S	40	100	13	33	6.5	17	50	23
IH-2S	40	100	18	45	8.5	22	60	27
IH-2L	68	170	21	53	8.5	22	110	50
IH-4S	40	100	21	53	8.5	22	70	32
IH-4L	68	170	21	53	8.5	22	120	54
IH-8S	44	110	28	70	22	55	350	158
IH-10S	44	110	28	70	22	55	375	170
IH-12S	44	110	28	70	22	55	400	181
IH-8L	72	180	28	70	22	55	547	248
IH-10L	72	180	28	70	22	55	566	256
IH-12L	72	180	28	70	22	55	585	268
IH-24S	44	110	32	82	28	70	700	318
IH-16L	72	180	32	82	28	70	829	376
IH-20L	72	180	32	82	28	70	867	394
IH-24L	72	180	32	82	28	70	905	411
IH-32L	72	180	32	82	28	70	991	450
IH-40L	72	180	34	85	34	86	1266	575
IH-48L	72	180	34	85	34	86	1342	610



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P.O. BOX 1707
RUTLAND, VT
05701

TEL: 802-773-4346
FAX: 802-773-2538

MODEL No's IH-8S thru IH-48L

