



APSERIES



WHAT IS UV?

UV is nature's way of purification. UV is a band of invisible light in the electromagnetic spectrum, in the range of 200-400 nm wavelengths. The UV wavelength of 253.7 nm possesses the greatest germicidal effectiveness, which penetrates the microbial cell membrane to destroy the DNA molecule, thus preventing cell replication.

UV AND BACTERIAL DISINFECTION

UV is used to provide bacterial disinfection in water. It does not change the physical or chemical characteristics in water. UV provides disinfection on contact. It does not have any residual properties left in the treated water. There are no known microorganisms resistant to UV.

AP SERIES

AP SERIES comes from Alfa, the UV Expert, an ISO 9001:2000 certified company having vast experience and credibility for supply of UV systems for critical process water applications. Today, Alfa UV systems have earned the trust and goodwill of organizations such as Glaxo Smithkline Beecham, Ford Motors, Hindustan Lever Limited, Colgate Palmolive, Pfizer, Novartis, Coca Cola, Texas Instruments, Pepsi, Ranbaxy, Cipla, Taj Group of Hotels, Oberoi Hotels and Johnson and Johnson, to name a few.

AP SERIES are available in standard models ranging from 1 m³/hr to 110 m³/hr.

BENEFITS OF AP SERIES

- Reliable and consistent UV disinfection efficiency.
- High quality and affordability
- Simple installation and maintenance.
- Compact units requiring minimum space.
- Easily adaptable to varied site conditions.
- UV chambers available in SS 304 / 316 / 316L. End connections normal and sanitary.
- Electrical panel with individual lamp indicators.

UNMATCHED PRODUCT FEATURES

- UV chambers both internally and externally electro polished with double side flanges, unique socket design, drain port and probe base.
- Quartz Glass technology for superior UV transmission.
- Specialized High intensity UV lamps rated for 9000 hours.
- Fail safe, on line validation with UV monitoring facility.*
- Time Elapse Meter.*
- Unique wiper assembly.**

* Optional.

** In select models.



Type of Industry	Microbial problem in Industry	Solution to the problem
Pharmaceutical	<ul style="list-style-type: none"> •Bacterial count in process water. •Bacterial growth in sand filter, carbon filter and UM plant •Decreased life of membrane 	Alfaa AP Series
Food & Beverage	<ul style="list-style-type: none"> •Decreased shelf life of the end product. •Bacterial count in process water. 	Alfaa AP Series
Packaged Drinking water, Dairy, Soft Drinks, Canneries	<ul style="list-style-type: none"> •Decreased shelf life of the end product.(bacterial spoilage) •Contamination in bottles 	Alfaa AP Series
Fish Hatcheries	<ul style="list-style-type: none"> •Increased fish mortality. •Whirling disease 	Alfaa AP Series
Paints	<ul style="list-style-type: none"> •Decreased shelf life of water based paints 	Alfaa AP Series
Poultry	<ul style="list-style-type: none"> •Increased bird mortality 	Alfaa AP Series
Hospitals	<ul style="list-style-type: none"> •Microbial contamination of water used in dialysis 	Alfaa AP Series

NOTE: For your requirement of ozone reduction, TOC reduction by Alfaa UV, kindly contact us.

TECHNICAL SPECIFICATIONS

Model No	Flow rate		Inlet / Outlet Connections	Power	Dimensions in mm UV Reactor Assy. (W x H x D) Control Panel (W x H x D)
	90 % UVT	95% UVT			
API-10	0.8 m ³ /hr	1 m ³ /hr	¾" BSP (M) (optional 1" TC)	42	650 x 150 x 184 300 x 400 x 200
API-20	1.5 m ³ /hr	2 m ³ /hr	¾" BSP (M) / (optional 1" TC)	65	980 x 150 x 184 300 x 400 x 200
API-35	4 m ³ /hr	5 m ³ /hr	1½" BSP (M) / (optional 1 ½" TC)	95	980 x 166 x 197 300 x 400 x 200
API-45	8 m ³ /hr	10 m ³ /hr	1½" BSP (M) / (optional 1½" TC)	170	980 x 166 x 197 400 x 600 x 200
API-70	15 m ³ /hr	18 m ³ /hr	1½" BSP (M) / (optional 1½" TC)	315	980 x 166 x 197 400 x 600 x 200

- Data is for 230 V operation.
- Maximum recommended pressure for all models is 120 psi.
- Flow based on 90% UV Transmission
- Flow rates can vary based on the quality of input water and end application.
- TC (Sanitary) end connections available on request.
- Suspended solids at the inlet to be limited to < 10 NTU.

The U.S. Public Health Service requires that UV disinfection equipment have a minimum UV dosage of 16,000 uws/cm² (microwatt seconds per square centimeter). Alfaa UV systems are manufactured to impart a dosage of 30,000 uws/cm². All significant water borne pathogenic microorganisms are destroyed by under 10,000 uws/cm².

