

# WAFER® UV SYSTEM ULTRAVIOLET DISINFECTION SYSTEMS

## MOST COMPACT MEDIUM PRESSURE SYSTEM

The Wafer® UV system is a unique, next-generation medium pressure UV system. At around a third of the size of comparative UV systems, and requiring significantly less maintenance space, the Wafer system offers easy installation and retrofit opportunities, even for the most space-restricted environments.

Whilst the Wafer system is designed to be the most compact UV system on the market; its optimised reactor design and polychromatic lamp technology make it one of the best performing. The Wafer system provides a minimum of 99.9% reduction of typical microorganisms, including chlorine-resistant microorganisms such as Cryptosporidium and Giardia. Most models within the range are third-party validated to the US EPA UVDGM, making them ideal for applications where microbiological control is critical.

As well as US EPA Validation, Wafer units are tested or certified to a number of regional and global standards such as NSF61, NSF50, NVI, CE, UL, and ACS. This gives installers and operators the knowledge that they are providing not only the most efficient solution but a fully compliant one.

The Wafer system also includes a number of advanced features. The automatic wiper and Twistlok™ lamps are designed to reduce maintenance frequency as well as ensure maintenance is safe, simple and fast.

Operators will also benefit from the highly configurable Spectra 3 control system. This includes a wide range of features such as data logging and data stream remote web monitoring. The MODBUS and PROFIBUS connections and operator configurable digital and analogue inputs and outputs provide easy integration to any Building Management or SCADA system.



## **SPECIFICATIONS**

- Horizontal or vertical installation
- Efficient and enhanced power control
- 9,000-hour lamp life
- Automatic power variation, between 100% – 30% power
- Hydraulically optimised low head-loss design
- High disinfection efficiency up to 99.999% reduction

#### **APPLICATIONS**

- Drinking Water
- Process Water in Food & Beverage
- Aquaculture
- De-ozonation
- Treatment of Swimming Pools
- Any Industrial application requiring high quality water

Features	Standard Chamber Specification	Options
Lamp Life	9,000 Hours	
Lamp design	TWISTLOK™ Quick Release, Enhanced Safety- Medium Pressure	
Lamp and Wiper Access	Single Ended Access	
Design Pressure	10 Barg Design (15 Barg Test)	
Number of Sensors	1-off (2-off for model WF-430-12)	
Variable Power	100% to 30% Power (Automatic Dose Pacing)	
Connection Type	PN10 Flanged (EN1092-1-BS4504)	PN16 Flanged (EN1092-1-BS4504), ANSI 150, AS 4087 (PN16), JIS B2220 - 10K
Generator Material	316L Stainless Steel	Superduplex (25Cr) Stainless Steel
Internal/External Finish	Electropolished	
Internal Surface Finish	3.2 Ra	
Quartz Type	High Purity Quartz Sleeves	TiO2 Doped quartz
Mounting	Fixed Brackets	
Cleaning system	Automatic Wiper System	
Temperature Probe	AT-487 (PT-100)	
Vent Port	1/2" BSP (Air Release Valve supplied for horizontal installations)	
Drain Port	1/4" BSP	
Sacrificial Anode—COMPONENT EXTRA	N/A	N/A
Ingress Protection (UV Chamber)	IP55	
Installation	Horizontal or Vertical (Lamps must be Horizontal)	
Features	Standard Control Panel Specification	Options
Material	Epoxy Coated Mild steel - RAL 7035	Stainless Steel (304)
Control Type	Spectra 3 Microprocessor	
Power supply	Electronic Ballast	
Ingress Protection	IP54	
Ventilation	Forced Air cooled (Fan)	
Interface	Spectra 3 Membrane	Spectra 3 Touch
Communication	Modbus (RS-422 / RS-485)	Profibus DP
Protection	Door Locked Isolator	
Operating Temperature	Max Working Ambient +45°C	
Digital Inputs	3-off selectable	Additional 3-off selectable
Digital Outputs	3-off selectable	Additional 3-off selectable
Analogue Inputs	1-off selectable	Additional 1-off selectable
Analogue Outputs	1-off selectable	Additional 1-off selectable

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