



## VT TOC

# ULTRAVIOLET TOC REDUCTION SYSTEMS

### DESIGNED FOR TOC REDUCTION APPLICATIONS

Evoqua's VT TOC from the ATG™ UV family of products is designed for superior TOC Reduction in UPW processes in the electronics and power industries.

### HIGHLY EFFICIENT & COST EFFECTIVE

Using energy efficient UV light sources and the latest variable power electronic ballasts, Evoqua's VT TOC provides cost-effective and efficient treatment with flexible options for easy integration. The low pressure, high output lamps, combined with the variable power option allows the operator to minimize OPEX costs while still delivering the required treatment effectiveness.

The range of configurable options, from surface finishes to pipe connections allows the user to configure the product easily to their specific requirements.

### SOPHISTICATED CONTROL SYSTEM

The Spectra 3 control system is a sophisticated microprocessor designed for control flexibility and system integration. With a range of user-selectable analog, and digital input and outputs, combined with Modbus® capability allow simple connection to a SCADA or BMS system. The Spectra 3 also provides a data logging facility with the ability to remotely check the performance from a mobile phone or tablet when the equipment is connected to the internet.

### INCREASE PRODUCTION UPTIME

Operators will benefit from the patent pending\* TwistLok™ lamp configuration, combining a simple lamp connection with a mechanical safety interlock for safe and speedy lamp replacement. In addition, the V-Clamp quartz seal system ensures that the seal can be fitted accurately without stressing the quartz sleeve or having a leaking seal.

The systems use the latest AT-900 UV intensity system, traceable to NIST standards to provide an effective method of monitoring performance, ensuring confidence in the system operation at all times. Using the feedback from the AT-900 also enables the power to the lamps to be varied, allowing power savings and increased lamp life for larger systems.

### SPECIFICATIONS

- Efficient and enhanced power control
- High performance, 185nm TOC Reduction lamps
- Simple, fast, and reliable maintenance
- Enhanced performance monitoring by sophisticated control system
- Built in safety features
- MODBUS or PROFIBUS connectivity

\*Patent pending in some countries.

## CHAMBER SPECIFICATIONS

Features	Standard Chamber Specification	Options
Lamp Life	16,000 hours	
Lamp design	TwistLok™ Quick Release, Enhanced Safety	
Design Pressure	10 Barg Design (15 Barg Test)	
Sensors	1 Monitor Package Incl NIST UV Sensor + PT100 Temp Sensor	
Variable Power	100% to 60% Power (Automatic Dose Pacing)	
Connection Type	EN 1092-1 (PN10)	ANSI-150, AS 4087 (PN16), DIN-32676, ASME BPE
Connection Orientation	U Type (Top-Top)	Z Type (Top-Bottom) (VT-16300-10 & VT-24300-14 only)
Material of Construction	316L Stainless Steel	
Internal Surface Finish	0.8 Ra	0.4 Ra
Internal/External Surface Treatment	Machine Polish	Electropolish
Installation/Mounting	Adjustable Inlet/Outlet Orientation	
Vent & Drain Port	Threaded (BSP)	DIN 32676, ASME BPE
Seals	FDA VITON	

## CONTROL PANEL SPECIFICATIONS

Features	Standard Control Panel Specification	Options
Material	Epoxy Coated Mild steel - RAL 7035	Stainless Steel (304)
Mounting	Wall Mounted	Floor Standing (dependent on Supply Voltage and Model)
Control Type	Microprocessor	
Power supply	Electronic Ballast	
Ingress Protection	IP54	IP56
Environmental Control	Forced Air cooled (Fan) Thermostat controlled anti-condensation heater (VT-16300-10 & VT-24300-14 only)	
Interface	Spectra Membrane (VT-4300-6 & VT-8300-8 only)	Spectra Touch
Communication	Modbus (RS-422 / RS-485)	Profibus DP
Protection	Door Locked MCCB Isolator	
Operating Temperature	Max Working Ambient +40°C	
Digital Inputs/Outputs	3 Inputs/ 3 Outputs	Additional 3 (As Standard for VT-16300-10 & VT-24300-14)
Analogue Inputs/Outputs	1 Input/ 1 Output	Additional 1 (As Standard for VT-16300-10 & VT-24300-14)
Supply Voltage	200-240V (50/60 Hz) (VT-4300-6 & VT-8300-8 only) 380-415V 3PH + N (50/60 Hz) (VT-16300-10 & VT-24300-14 only)	380-415V 3PH (50/60 Hz) 440V 3PH (50/60 Hz) 690V 3PH (50/60 Hz) (Above options apply to VT-16300-10 & VT-24300-14 only)
Cable Length	10m	15m, 30m



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