



## COMMERCIAL & INDUSTRIAL

The **Ionix-UV** is a WRAS-approved ultraviolet disinfection system designed for safe, chemical-free water treatment.

Each system is supplied with a programmable logic controller (PLC), thermal drain, and UV intensity monitor.

Engineered for reliability and efficiency, the Ionix-UV delivers consistent performance with simple handling and low operating costs.

### Applications

- ✓ Private drinking water supplies
- ✓ Process water
- ✓ Water cooling supplies
- ✓ Small to medium scale industrial systems (Series 4)
- ✓ Medium to large-scale industrial systems (Series 5 & 6)
- ✓ Water recycling

### Temperatures

- ✓ Recommended water temperature 5-35°C
- ✓ Possible temperature range 0-60°C

### Regulatory

- ✓ WRAS Approval No: 240104723

### Technical description

- ✓ Single-centred low-pressure lamp UV System (Series 4)
- ✓ Concentrically arranged low-pressure lamp UV System (Series 5 & 6)
- ✓ UV lamp(s) and quartz sleeve removable from either end of chamber



Flow rates (m <sup>3</sup> /h-r)	SERIES 4	SERIES 5(2)	SERIES 5(3)	SERIES 6
30 mJ/cm <sup>2</sup> @98% UVT	8.4	20.5	27.5	40
40 mJ/cm <sup>2</sup> @98% UVT	6.4	13.5	21.5	30
30 mJ/cm <sup>2</sup> @95% UVT	7.7	18	25.5	37
40 mJ/cm <sup>2</sup> @95% UVT	5.5	11.5	19	27.5

All flows are calculated at end of lamp life time

Please contact us for further information regarding flow rates

For the disinfection of clean water to meet relevant water standards





UV-IONIX SERIES 4			
Certification	WRAS approved (240104723)		
<b>UV REACTION CHAMBER</b>			
Material construction	316L stainless steel		
Internal/external finish	Cleaned/ polished		
Lamp access	Double-ended		
Thermal drain	Yes		
Mounting	Supplemental fixing bracket		
Connection size	2"		
Connection type	Male BSP thread		
Dimensions	Refer to general arrangement drawing		
Reactor volume approx	5.9 L		
Total weight (dry)	4.6 kg		
Operating pressure (max)	10 bar		
Installation	Horizontal/vertical		
Quartz sleeve type	High purity silica quartz		
<b>UV LAMP</b>			
Type	SS136XO4SE		
Lamp design	Single-ended		
Lamp power	98 W		
UVC output @ 254 nm	25 W		
Quantity	1		
Lamp life	9000 hours		
<b>CONTROL PANEL</b>			
Material	Powder coated mild steel		
Dimensions (W x H x D)	500 x 400 x 200 mm		
Weight	8.6 kg		
Mains power	110-240 VAC, 1 Ph, 50-60 Hz		
Power consumption	98 W		
Protection	Type C MCB		
Mains connection	DIN terminal		
Lamp power supply	Electronic ballast		
Lamp leads	2.9 m		
Control type	Programmable logic controller		
Interface	Text button display		
Communication	Modbus TCP/IP, PROFINET, SIMATIC S7		
UV intensity monitor	Yes		
<b>OPTIONS</b>			
Remote UV level	System healthy	GSM text message system	Inlet/outlet configuration or size
LAN connection	Remote start/stop	Stop flow fault condition	Glass reinforcement plastic (GRP)
Remote screen		Stainless steel	



	UV-IONIX SERIES 5 (2)	UV-IONIX SERIES 5 (3)	
Certification	WRAS approved (240104723)		
<b>UV REACTION CHAMBER</b>			
Material construction	316L stainless steel		
Internal/external finish	Cleaned/ polished		
Lamp access	Double-ended		
Thermal drain	Yes		
Mounting	Supplemental fixing bracket		
Connection size	2"		
Connection type	Male BSP thread		
Dimensions	Refer to general arrangement drawing		
Reactor volume approx	11 L		
Total weight (dry)	11 kg		
Operating pressure (max)	10 bar		
Installation	Horizontal/vertical		
Quartz sleeve type	High purity silica quartz		
<b>UV LAMP</b>			
Type	SS236XO5SE	SS336XO5SE	
Lamp design	Single-ended		
Lamp power	144 W	265 W	
UVC output @ 254 nm	25 W		
Quantity	2	3	
Lamp life	9000 hours		
<b>CONTROL PANEL</b>			
Material	Powder coated mild steel		
Dimensions (W x H x D)	500 x 400 x 200 mm		
Weight	14 kg		
Mains power	110-240 VAC, 1 Ph, 50-60 Hz		
Power consumption	145 W	265 W	
Protection	Type C MCB		
Mains connection	DIN terminal		
Lamp power supply	Electronic ballast		
Lamp leads	2.9 m		
Control type	Programmable logic controller		
Interface	Text button display		
Communication	Modbus TCP/IP, PROFINET, SIMATIC S7		
UV intensity monitor	Yes		
<b>OPTIONS</b>			
Remote UV level	System healthy	GSM text message system	Inlet/outlet configuration or size
LAN connection	Remote start/stop	Stop flow fault condition	Glass reinforcement plastic (GRP)
Remote screen		Stainless steel	

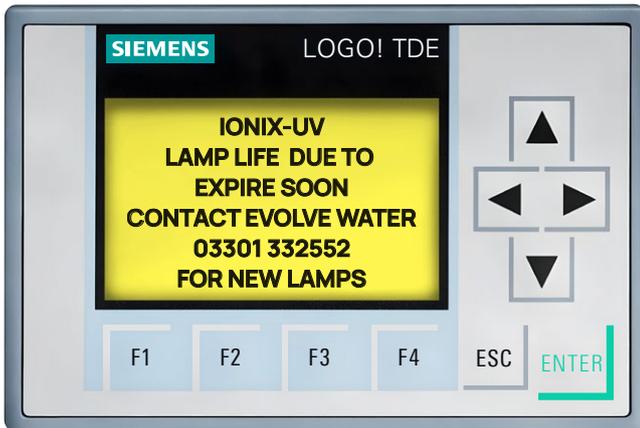
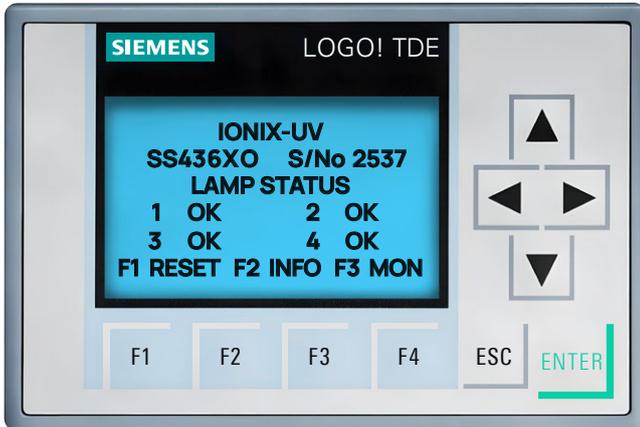


		UV-IONIX SERIES 6	
Certification		WRAS approved (240104723)	
<b>UV REACTION CHAMBER</b>			
Material construction		316L stainless steel	
Internal/external finish		Cleaned/ polished	
Lamp access		Double-ended	
Thermal drain		Yes	
Mounting		Supplemental fixing bracket	
Connection size		4"	
Connection type		Male BSP thread	
Dimensions		Refer to general arrangement drawing	
Reactor volume approx		16 L	
Total weight (dry)		17.3 kg	
Operating pressure (max)		10 bar	
Installation		Horizontal/vertical	
Quartz sleeve type		High purity silica quartz	
<b>UV LAMP</b>			
Type		SS436XO6SE	
Lamp design		Single-ended	
Lamp power		311 W	
UVC output @ 254 nm		15 W	
Quantity		3	
Lamp life		9000 hours	
<b>CONTROL PANEL</b>			
Material		Powder coated mild steel	
Dimensions (W x H x D)		500 x 400 x 200 mm	
Weight		14 kg	
Mains power		110-240 VAC, 1 Ph, 50-60 Hz	
Power consumption		311 W	
Protection		Type C MCB	
Mains connection		DIN terminal	
Lamp power supply		Electronic ballast	
Lamp leads		2.9 m	
Control type		Programmable logic controller	
Interface		Text button display	
Communication		Modbus TCP/IP, PROFINET, SIMATIC S7	
UV intensity monitor		Yes	
<b>OPTIONS</b>			
Remote UV level	System healthy	GSM text message system	Inlet/outlet configuration or size
LAN connection	Remote start/stop	Stop flow fault condition	Glass reinforcement plastic (GRP)
Remote screen		Stainless steel	

### Controls

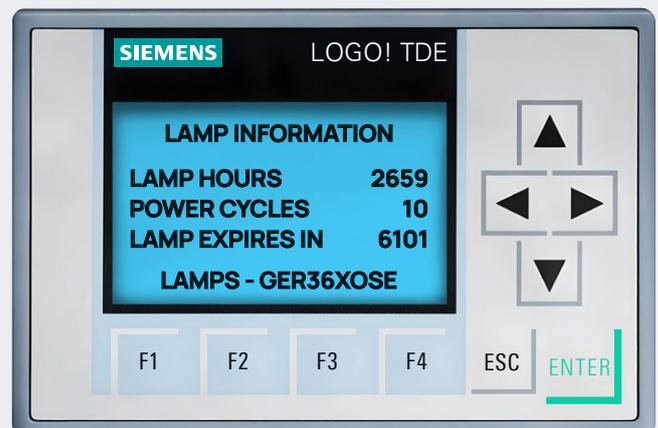
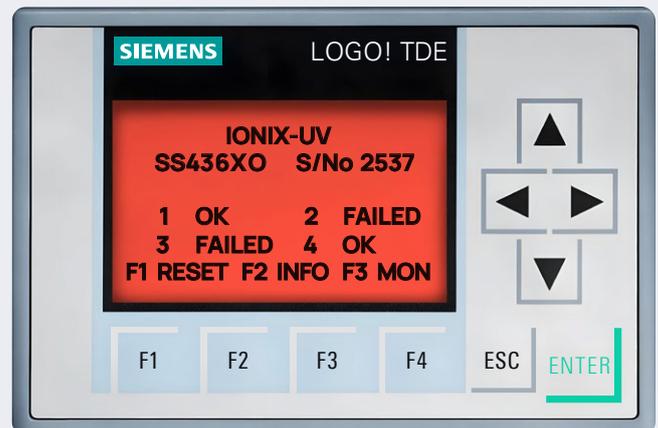
#### Front Panel

- ✓ Main isolator switch for system on/off
- ✓ LCD text display screen



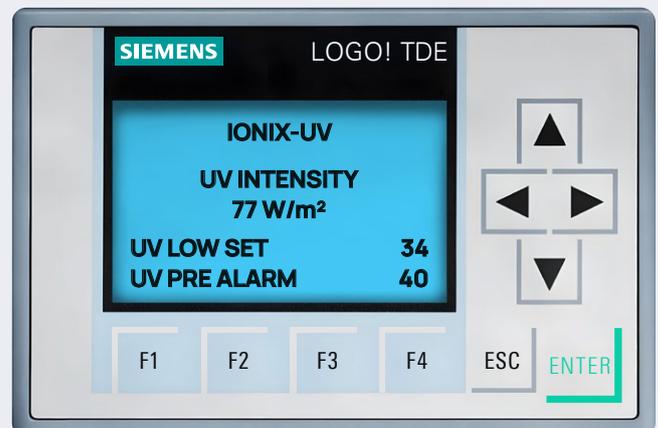
### Display information

- ✓ Lamp hours – counts total operating hours per lamp
- ✓ Power cycles – adds one each time the unit powers on
- ✓ Lamp expiry – countdown from 8,760 hours (1 year)
- ✓ Lamp type – identifies lamp specification



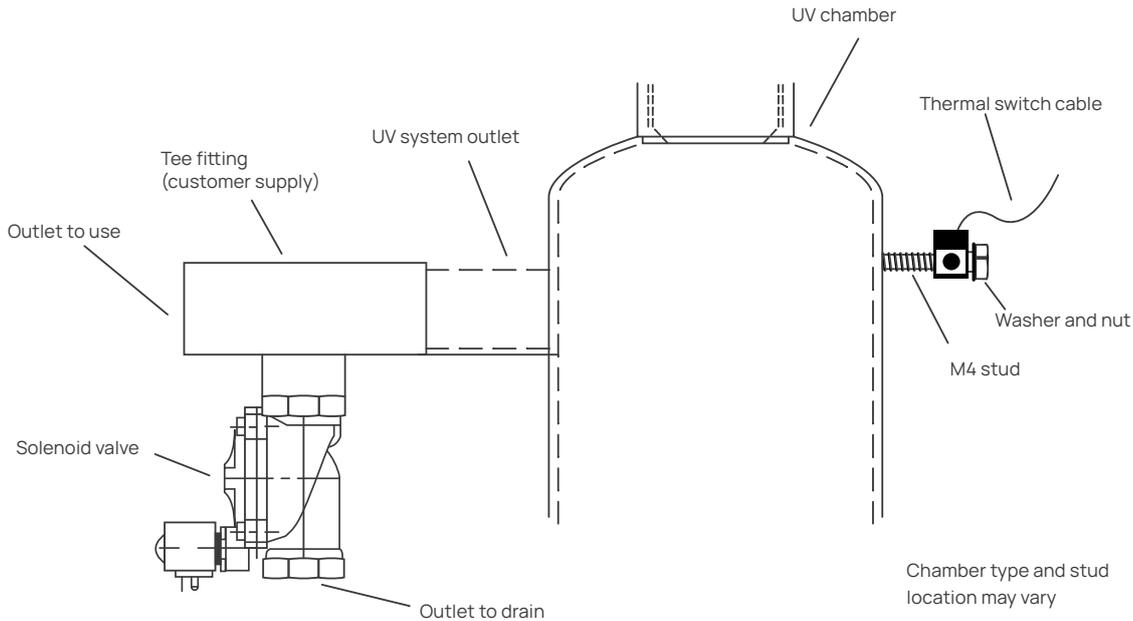
### UV Intensity Monitor

- ✓ Displays current UV intensity and pre-alarm thresholds



### Thermal drain

- ✓ Thermal switch mounted externally on chamber to signal high temperature (set via PLC)
- ✓ Switch closes on rising temperature to activate solenoid
- ✓ ½" BSP normally closed solenoid valve supplied for chamber outlet
- ✓ Water supply must be available when solenoid opens
- ✓ Install solenoid on chamber outlet; outlet must drain safely or return to a large-capacity storage tank
- ✓ For vertical installations, position thermal sensor uppermost
- ✓ When activated, solenoid opens to drain chamber and reduce temperature



- ✓ The thermal switch cable is to be attached as shown above. If mounting vertically, install the chamber so the sensor is uppermost
- ✓ The solenoid opens to allow flow through the chamber to drain
- ✓ The outlet of the solenoid should be taken to drain, or can be returned to a storage tank if the capacity is large enough to cause only a small temperature rise

### Thermal drain display

- ✓ Shows chamber temperature and drain set point

