Hanovia's New *Ultraviolet Energy Optimisation* (UVEO) system technology has been designed and developed with industry requirements at the forefront, using 90 years of experience to deliver next generation technology for efficiency and effective water treatment today.

**UVEO Technology powering a new generation of UV chambers, optimised for industry**

Hanovia’s New ‘Ultraviolet Energy Optimisation’ (UVEO) system technology has been designed and developed with industry requirements at the forefront, using 90 years of experience to deliver next generation technology for efficiency and effective water treatment today.

**KEY FEATURES**  
**WHAT IT GIVES YOU**  
**BENEFITS FOR YOU**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Optimised hydraulic chamber design</td>
<td>Maximum water treatment at highest efficiency</td>
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<tr>
<td>Single lamp</td>
<td>Lower power use than comparative multi-lamp systems</td>
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<td>UVGuard patented technology</td>
<td>Eyelid shutter shields you from escaping UV rays from the chamber</td>
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<td>Stepless electronic ballast</td>
<td>Allows ballast power to be adjusted from 100 to 30% to optimise process conditions</td>
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<td>Hanovia's medium pressure lamp technology</td>
<td>Effective against all microbes including chlorine-resistant Cryptosporidium and Giardia</td>
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<td>Wetted parts use food grade approved materials</td>
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<td>H Edition designed for hygienic use with high specification internal finish</td>
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<td>Designed for the food and beverage industry</td>
<td>Allows accurate measurement of UV performance with ability to verify UV sensor without interrupting production</td>
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<td>DVGW calibrated dry UV sensor</td>
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**UV CHAMBER**

**Material:**
SIS 316L / 1.4432

**Internal finish:**
Tube: welds as laid -<0.8 µm Ra electo-polished and passivated

**External finish:**
BSEN 10088-2 or 10088-3, 1J or 2J and ASTM No.4

**Process (mating) connections:**
Tri-clamp

**Drain connection:**
Tri-clamp blanked off

**End plate:**
Removable end plate

**Arc tube enclosure:**
Pure quartz

**Number of arc tubes (lamps):**
1

**Expected lamp life:**
9000 hours

**Temperature sensor:**
Yes

**UV sensor:**
Pre-calibrated DVGW compliant dry sensor with UV Guard window

**Working fluid temperature:**
0°C to 60°C wiped 0°C to 80°C unwiped

**Maximum CIP Temperature:**
95°C if CIP request acknowledged

**Hydrostatically pressure tested:**
Yes to PED requirements EN13445

**Operating pressure:**
10 bar

**Seals:**
EPDM Food grade

**OPTIONS**

**Printed Operating Manual and Installation Guides in Chinese, English, French, German and Spanish**

**Lead length:**
30 m to chamber from control or ballast

**Internal finish:**
<0.6 µm welds ground out or 0.38 µm welds ground out electro-polished and passivated

**Maximum CIP Temperature:**
130°C if CIP request acknowledged

**Flange options:**
Table ‘E’, JIS, ANSI 150 and DN series PN16

**Weld:**
Tri-clamp connection

**Bleed:**
Tri-clamp connection with or without valve

**Wiper:**
Automatic (electrically driven)

**Lamp access:**
Electrical safety cut-out

**Cabinet materials:**
Stainless steel 304 flat roof or 316 sloping roof

**Water leak detection:**
Detects water leaks from quartz thimble (VFC output)

**Documentation support pack**

**In-field UV reference sensor kit**

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**CABINET**

**Material:**
Polyester coated carbon steel

**Degree of protection:**
IP55/NEMA 4 but not for outside use

**Supply voltages:**
380 to 480 V 50/60 Hz (2 ph L1, L2)

**Operating temperature range:**
5°C to 45°C

**Relative humidity:**
<95% non-condensing

**Cooling fans:**
Yes

**Interconnecting cable lengths:**
1 m to cabinet 10 m to chamber

**CUSTOMER OUTPUTS**

4-20 mA passive outputs:
UV intensity, UV dose and temperature

VFC outputs:
Lamp ready (enable flow), System running, Common warning, Common trip, Low UV warning, OK to CIP, System in remote, 3 configurable

24 V dc output:
Bleed valve

**CUSTOMER INPUTS**

4-20 mA passive inputs:
Flow meter and Transmittance meter

VFC inputs:
Remote start/stop, CIP Inhibit, reduce power

24 V dc input:
Start and stop

**CUSTOMER COMMUNICATION PORT**

Modbus:
RS 485

**BALLAST**

**Enclosure material:**
Plastic and aluminium

**Degree of protection:**
IP55/NEMA 4

**Supply voltages:**
380 to 480 V 50/60 Hz (2 ph L1, L2)

**Operating temperature range:**
5°C to 45°C

**Relative humidity:**
<95% non-condensing

**Cooling fans:**
Yes

**Interconnecting cable lengths:**
1 m to cabinet 10 m to chamber

**Power adjustment:**
Stepless variable power

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**Distributed in Australia By**

Fluidquip Australia Pty Ltd
Unit 7/ 84-90 Old Bathurst Rd
Emu Plains. NSW
Ph: 02 4735 5054
fluidquip@fluidquip.com.au
www.fluidquip.com.au