



CONTROL YOUR OWN WATER QUALITY!

Models: 405-PWUV-HO-200/300-04,
405-PWUV-HO-200/300-10, 405-PWUV-HO-200/300-14,
405-PWUV-HO-200/300-25, 405-PWUV-HO-200/300-40

If you are unsure of the microbiological quality of your source water or if you are looking for additional security from your municipal water source, then Penguin Water has the solution in the high output series of residential UV systems.

UV technology is proven to control microbiological (bacteria & virus) issues in water including *E.coli*, *Cryptosporidium* and *Giardia lamblia*.

Penguin Water 405-PWUV-HO-200/300 series provides the ultimate in UV protection for your home with the inclusion of a true 254nm Teflon® based UV sensor on 405-PWUV-HO-300 models that continuously monitors the performance of the UV system and displays the output via a colour screen (optional on 405-PWUV-HO-200 systems). In addition to UV output, diagnostics, system status, warnings, even QR codes are included.

With the integral expandability port, the addition of an optional module (listed on the back) is a simple plug-and-play option!

Product Features

- Free floating (no cable twist), keyed-in-place, 254nm Teflon® based UV sensor (405-PWUV-HO-300 models) continuously measures and displays UV output (as a %)
- Colour screen controller with lamp key technology for protected lamp replacement, includes QR codes, full diagnostics & warnings
- “Future-proof” expandability port for future upgrades and options
- Axial flow, 316L stainless steel polished reactors, designed & manufactured to ASME pressure vessel standards
- User friendly bayonet style lamp connector (quick ¼ turn removal with no extra tools needed)
- Reliable, industry proven, proprietary low pressure high-output coated UV lamps with ceramic bases for durability and long life (10,000 hours)
- Constant current electronic controller (one controller for all LPHO units) in a splash proof case, fully potted ballast virtually eliminates common water damage issue
- Full customization available as an option (language, home screen, phone number, QR codes, etc.)

Sample Screens



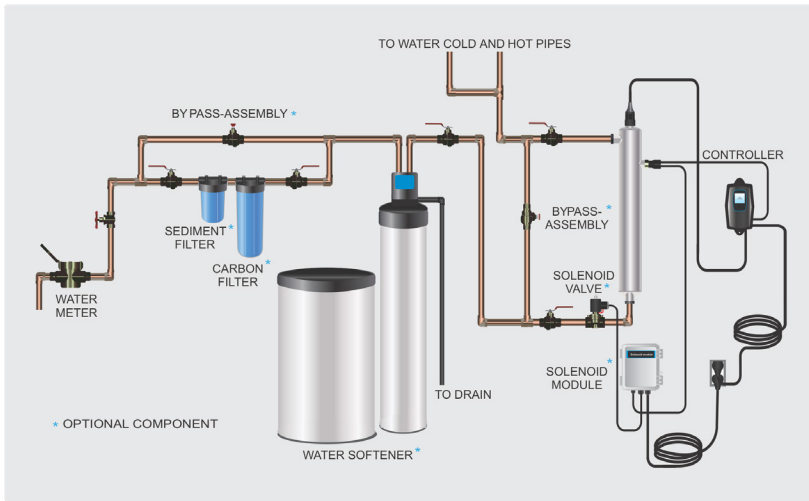
Point-of-Use (POU)

405-PWUV-HO-200/300-04 series, for flow rates of 19 lpm (5 gpm)

Point-of-Entry (POE)

405-PWUV-HO-200/300-10 series, for flow rates of 38 lpm (10 gpm)
405-PWUV-HO-200/300-14 series, for flow rates of 57 lpm (15 gpm)
405-PWUV-HO-200/300-25 series, for flow rates of 95 lpm (25 gpm)
405-PWUV-HO-200/300-40 series, for flow rates of 151 lpm (40 gpm)

Typical POE Installation



Standard Output - Equipment Specifications

MODEL	405-PWUV	405-PWUV	405-PWUV	405-PWUV	405-PWUV
	-HO-200-04	-HO-200-10	-HO-200-14	-HO-200-25	-HO-200-40
Flow Rate (30mJ/cm ²) @ 95% UVT)	5 GPM	10 GPM	15 GPM	25 GPM	40 GPM
	18.91 lpm	37.9 lpm	57 lpm	95 lpm	151 lpm
Flow Rate (40mJ/cm ²) @ 95% UVT)	1.1 m ³ /hr	2.3 m ³ /hr	3.4 m ³ /hr	5.7 m ³ /hr	9.3 m ³ /hr
	8 GPM	19 GPM	27 GPM	47 GPM	78 GPM
Flow Rate (16mJ/cm ²) @ 95% UVT)	30.3 lpm	71.9 lpm	102.2 lpm	178 lpm	295 lpm
	1.8 m ³ /hr	4.3 m ³ /hr	6.1 m ³ /hr	10.7 m ³ /hr	17.7 m ³ /hr
Flow Rate (40mJ/cm ²) @ 95% UVT)	3 GPM	7 GPM	11 GPM	19 GPM	31 GPM
	11.4 lpm	26.5 lpm	41 lpm	72 lpm	117 lpm
Port Size	1/2" MNPT	3/4" MNPT	1" MNPT	1" MNPT	1 1/2" MNPT
	0.7 m ³ /hr	1.6 m ³ /hr	2.5 m ³ /hr	4.3 m ³ /hr	7.0 m ³ /hr
Electrical	90-265V/50-60Hz.				
Plug Type	American: NEMA 5-15P				
Lamp Watts	18	34	45	67	101
Power (Watts)	20 (19 @ 230V)	38 (36 @ 230V)	57 (48 @ 230V)	73 (72 @ 230V)	115 (108 @ 230V)
Replacement Lamp	406-PUV-LM-HO-04	406-PUV-LM-HO-10	406-PUV-LM-HO-14	406-PUV-LM-HO-25	406-PUV-LM-HO-40
Replacement Sleeve	406-PUV-QS-HO-02	406-PUV-QS-HO-10	406-PUV-QS-HO-14	406-PUV-QS-HO-25	406-PUV-QS-HO-40
Chamber Material	316L Stainless Steel, A249 Pressure Rated Tubing, Polished & Passivated				
Reactor Dimensions	3.5 x 11.7" (8.9 x 29.8cm)	3.5 x 16.5" (8.9 x 41.8cm)	3.5 x 20.0" (8.9 x 50.8cm)	3.5 x 26.9" (8.9 x 68.3cm)	3.5 x 40.7" (8.9 x 103.4cm)
Controller Dimensions	21.7 x 10.8 x 10.2 cm (8.6 x 4.2 x 4")				
Operating Pressure	0.7-10.3 bar (10-150 psi)				
Operating Water Temp	2-40° C (36-104° F)				
UV Monitor	YES on all "405-PWUV-HO-300" models. Upgrade available for "405-PWUV-HO-200" models				
Solenoid Output	YES (optional solenoid module (406-PWUV-MD-SOL1) sold separately)				
Dry Contacts	YES (remote alarm module (406-PWUV-MD-RAM) sold separately)				
4-20mA Output	YES (4-20mA module (406-PWUV-MD-420) sold separately)				
Lamp Change Reminder (audible & visual)	YES				
Lamp Out Indicator (audible & visual)	YES				
Shipping Weight	9.9 lbs	11.9 lbs	13.2 lbs	16.1 lbs	21.6 lbs

Optional Equipment Modules

UV Concierge

Available for WEB, iOS, and Android platforms providing live, dynamic feedback on all features and functions of your UV system.



Water Quality Monitor

Allows for remote monitoring of all major and minor alarms that take place on the main UV system. Three LED's visually display system functionality from up to 150' (46m) away.



Custom Dealer Programmer

Customize your UV controller with your own company name, logo, website, QR code and contact information. Capture the lucrative replacement lamp market by creating a direct link back to your own website!



UV Sensor Module

Allows the 254nm UV wavelength to be measured and displayed via the controller. The sensor plugs directly into the controller and is mounted in the sensor port located on all reactors.



Solenoid Module

Used to power a remote normally closed solenoid valve (not included). Solenoid will close on lamp failure or when low UV conditions are detected by the sensor.



TRV (temperature management relief valve)

TRV allows for a small amount of water to be physically released (dumped) from the UV unit to allow for cooling of the water. Used in applications of extended "no flow" conditions, or when the temperature of the treated water is of a critical nature.



Cooling Fan

To reduce water temperature inside the reactor through mechanics and convection without wasting any water. Runs independently and continuously. Comes with a compact modular power adapter with interchangeable AC clips that operates from 90-264V (47-63Hz.)



4-20mA Module

Used for signal transfer to a remote device such as a data logger or computer.



Remote Alarm (Dry Contact) Module

Used for signal transfer to a remote alarm or dry contacts.



Manufacturer's Warranty

REACTORS - Ten (10) year Limited Warranty
ELECTRONICS - Three (3) year Limited Warranty
UV LAMPS - One (1) year Limited Warranty
QUARTZ SLEEVES - One (1) year Limited Warranty



Contact Penguin for complete warranty document including conditions and exclusions.