

Technical Data Sheet

Hallett™ 500PN

www.uvpure.com

Potable Water Applications



Model

Hallett 500PN

Validation protocol

NSF/ANSI 55 CLASS A
by NSF International
Watermark of Australia



Operating Range

| | |
|--------------------------------|------------------------------|
| Flow (single unit) | Up to 16.5 US gpm (62.5 lpm) |
| UV dose | Min. 40 mJ/cm ² |
| UV Transmittance [UVT] (water) | Minimum 75% UVT |
| Hardness (water) | Maximum 855 mg/L (50 gpg) |
| Iron (water) | Maximum 3 mg/L (3 ppm) |
| Temperature (air and water) | 34 - 104°F (1 - 40°C) |
| Water pressure | 5 - 100 psig (34 - 690 kPa) |
| Relative humidity (air) | Maximum 70% |

Features

Quartz sleeve cleaning
Wiper position switch
Purge valve
Cooling
Flow restrictor
Shut-off valve

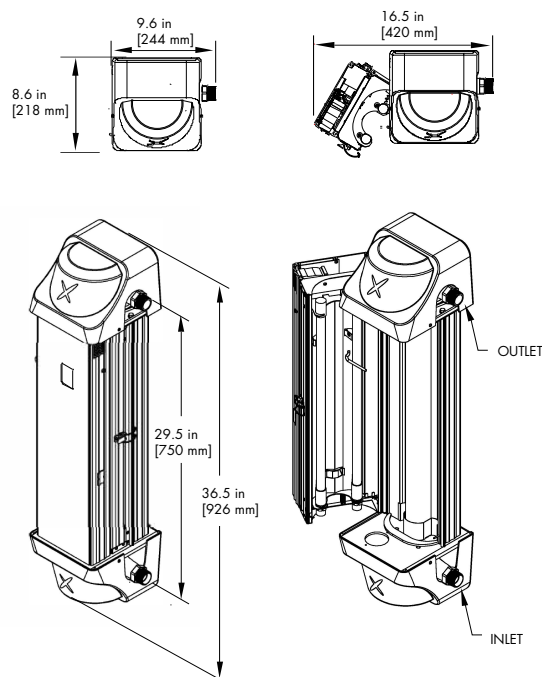
Built-in - automatic mechanical wiper
Built-in
Built-in
Built-in - forced air
Standard - internal
Optional - automatic solenoid

Electrical/Instrumentation

| | |
|--|---|
| Voltage | 120 VAC/60 Hz; or 230 VAC/50 Hz |
| Power consumption (nominal) | 196 W |
| Certifications | UL 979; IEC 60335-1; IEC 60335-2-109; CE |
| UV lamps | Dual LPHO - air mounted |
| Lamp life (typical) | 9,000 hours |
| Lamp cycles (recommended) (preheat ballast) | Maximum 12 per 24 hours |
| Sensors | Dual UV - calibrated to NIST standards |
| Dry contacts | Built-in - 2 provided (warning and alarm) |
| Interface | Colour LCD resistive touchscreen display |
| Alarming | Indicator light and audible alarms |
| Remote start/stop | Built-in |
| Onboard diagnostics | Built-in |
| 4-20mA Output & Modbus | Optional |

Physical

| | |
|---------------------------|--|
| Dimensions (H x W x D) | 36.5 x 9.6 x 8.6 in (926 x 244 x 218 mm) |
| Weight (dry) | 32 lb (14.6 kg) |
| Weight (wet) | 36 lb (16.3 kg) |
| Wetted parts | Meets NSF/ANSI/CAN 61 & NSF/ANSI 372 for water up to 73°F (23°C) |
| Body materials | Anodized aluminum and 316 Stainless Steel |
| Body configuration | Double door with side hinges |
| Inlet/outlet ports | 1" MNPT Stainless Steel, optional - Stainless Steel hose |
| Ingress Protection rating | IP 51, optional - IP 66 for NEMA cabinet systems |
| Multiple units | Multiplex manifold and cabinets available |
| Warranty | 5-year limited warranty for structural, hardware and mechanical components; 3-year limited warranty on electrical components and quartz sleeves; 12-month limited warranty on bulbs; and 1-year limited warranty on sensor probes |



**Contact a UV Pure
representative to
confirm product
operating parameters
for specific applications.**

info@uvpure.com

The Hallett 500PN is installed indoors on a wall in a dry location. The unit should be plumbed in downstream of any pretreatment devices but upstream of distribution plumbing. The Hallett 500PN plugs into a 120Vac ground-fault circuit-interrupter (GFCI) or a 230Vac residual current device (RCD) (dependent on territory). The Hallett 500PN incorporates both audible and visual alarms to indicate system status and an optional normally closed solenoid valve is available to shut off the water supply in the event of a system fault.

The automatic quartz cleaning feature is engineered to eliminate the periodic maintenance required by conventional UV systems. The UV lamps p/n E300209, Lamp Pair p/n E300210, require replacement after 12 months of operation.



System Tested and Certified by NSF International against NSF/ANSI Standard 55 for Disinfection Performance, Class A.

This Class A system conforms to NSF/ANSI 55 for the disinfection of microbiologically contaminated water that meets all other public health standards. This system is not intended to convert wastewater or raw sewage to drinking water. The system is intended to be installed on visually clear water.

NSF/ANSI 55 defines wastewater to include human and/or animal body waste, toilet paper, and any other material intended to be deposited in a receptacle designed to receive urine and/or feces (blackwaste); and other waste materials deposited in plumbing fixtures (greywaste).

If this system is used for the treatment of untreated surface waters or ground water under the direct influence of surface water, a device found to be in conformance for cyst reduction under the appropriate NSF/ANSI Standard shall be installed upstream of the system.

Manufactured by: UV Pure Technologies Inc.
455 Milner Avenue Toronto, Ontario,
M1B 2K4
416-208-9884
888-407-9997
info@uvpure.com

All replacement parts may be purchased through UV Pure.

The following table is in accordance with standard AS 3497:2021

| CATEGORY | TREATMENT | FUNCTION | Hallett 500PN |
|----------|--|--|---------------|
| I | Bacteriostatic | Will stop bacteria increasing but will not remove them unless Category II(a) is passed | N/A |
| II(a) | Bacterial removal | Will remove or inactivate bacteria | PASS |
| II(b) | Virus removal | Will remove or inactivate viruses* | PASS |
| II(c) | Protozoa removal | Will remove or inactivate Cryptosporidium and Giardia. Will not remove or inactivate bacteria and viruses unless Category II(a) and Category II(b) are passed. | PASS |
| III | Turbidity and particulate removal | Reduces cloudiness | N/A |
| IV | Taste and Odour reduction | Reduces tastes and odours | N/A |
| V | Chemical contaminant reduction | Decreases certain chemicals | N/A |
| VI | Other treatment type not captured in Categories I to V | No verification methods are defined | N/A |

*Most viruses such as poliovirus and rotavirus

Technical Data Sheet

Hallett™ 750PN

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Potable Water Applications



Model

Hallett 750PN

Validation protocol

NSF/ANSI 55 CLASS A
by NSF International
Watermark of Australia



Operating Range

| | |
|--------------------------------|-----------------------------|
| Flow (single unit) | Up to 27.4 US gpm (104 lpm) |
| UV dose | Min. 40 mJ/cm ² |
| UV Transmittance [UVT] (water) | Minimum 75% UVT |
| Hardness (water) | Maximum 855 mg/L (50 gpg) |
| Iron (water) | Maximum 3 mg/L (3 ppm) |
| Temperature (air and water) | 34 - 104°F (1 - 40°C) |
| Water pressure | 5 - 100 psig (34 - 690 kPa) |
| Relative humidity (air) | Maximum 70% |

Features

Quartz sleeve cleaning
Wiper position switch
Purge valve
Cooling
Flow restrictor
Shut-off valve

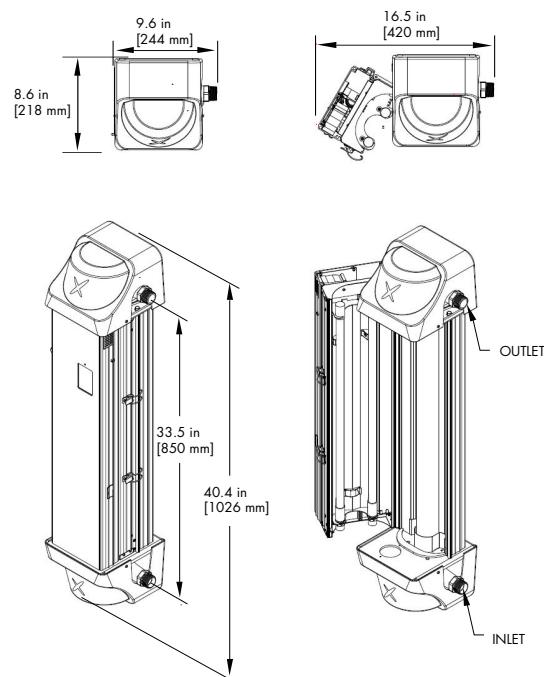
Built-in - automatic mechanical wiper
Built-in
Built-in
Built-in - forced air
Standard - internal
Optional - automatic solenoid

Electrical/Instrumentation

| | |
|--|---|
| Voltage | 120 VAC/60 Hz; or 230 VAC/50 Hz |
| Power consumption (nominal) | 222 W |
| Certifications | UL 979; IEC 60335-1; IEC 60335-2-109; CE |
| UV lamps | Dual LPHO - air mounted |
| Lamp life (typical) | 9,000 hours |
| Lamp cycles (recommended) (preheat ballast) | Maximum 12 per 24 hours |
| Sensors | Dual UV - calibrated to NIST standards |
| Dry contacts | Built-in - 2 provided (warning and alarm) |
| Interface | Colour LCD resistive touchscreen display |
| Alarming | Indicator light and audible alarms |
| Remote start/stop | Built-in |
| Onboard diagnostics | Built-in |
| 4-20mA Output & Modbus | Optional |

Physical

| | |
|---------------------------|--|
| Dimensions (H x W x D) | 40.4 x 9.6 x 8.6 in (1026 x 244 x 218 mm) |
| Weight (dry) | 34 lb (15.5 kg) |
| Weight (wet) | 38 lb (17.2 kg) |
| Wetted parts | Meets NSF/ANSI/CAN 61 & NSF/ANSI 372 for water up to 73°F (23°C) |
| Body materials | Anodized aluminum and 316 Stainless Steel |
| Body configuration | Double door with side hinges |
| Inlet/outlet ports | 1" MNPT Stainless Steel, optional - Stainless Steel hose |
| Ingress Protection rating | IP 51, optional - IP 66 for NEMA cabinet systems |
| Multiple units | Multiplex manifold and cabinets available |
| Warranty | 5-year limited warranty for structural, hardware and mechanical components; 3-year limited warranty on electrical components and quartz sleeves; 12-month limited warranty on bulbs; and 1-year limited warranty on sensor probes |



Contact a UV Pure representative to confirm product operating parameters for specific applications.

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The Hallett 750PN is installed indoors on a wall in a dry location. The unit should be plumbed in downstream of any pretreatment devices but upstream of distribution plumbing. The Hallett 750PN plugs into a 120Vac ground-fault circuit-interrupter (GFCI) or a 230Vac residual current device (RCD) (dependent on territory). The Hallett 750PN incorporates both audible and visual alarms to indicate system status and an optional normally closed solenoid valve is available to shut off the water supply in the event of a system fault.

The automatic quartz cleaning feature is engineered to eliminate the periodic maintenance required by conventional UV systems. The UV lamps p/n C300064, Lamp Pair p/n C300065, require replacement after 12 months of operation.



System Tested and Certified by NSF International against NSF/ANSI Standard 55 for Disinfection Performance, Class A.

This Class A system conforms to NSF/ANSI 55 for the disinfection of microbiologically contaminated water that meets all other public health standards. This system is not intended to convert wastewater or raw sewage to drinking water. The system is intended to be installed on visually clear water.

NSF/ANSI 55 defines wastewater to include human and/or animal body waste, toilet paper, and any other material intended to be deposited in a receptacle designed to receive urine and/or feces (blackwaste); and other waste materials deposited in plumbing fixtures (greywaste).

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| II(b) | Virus removal | Will remove or inactivate viruses* | PASS |
| II(c) | Protozoa removal | Will remove or inactivate Cryptosporidium and Giardia. Will not remove or inactivate bacteria and viruses unless Category II(a) and Category II(b) are passed. | PASS |
| III | Turbidity and particulate removal | Reduces cloudiness | N/A |
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