UV Water Disinfection Systems

Protect Your Water. **Protect Your Family.**

eps

Rethinking Water

What is UV (ultraviolet) water disinfection and how does it work?

UV is a powerful, non-chemical way to disinfect your water supply using a special light, invisible to the eye. Water is treated as it runs through a stainless-steel chamber that contains a UV lamp. As water flows past the lamp, illness-causing microorganisms receive a lethal dose of UV light that attacks their DNA and eliminates their ability to reproduce, thus deactivating them.

Benefits of UV Disinfection

- **Ideal for Well Water and Beyond.** Delivers consistent, reliable protection for your home, business or facility with proven UV technology, without adding chemicals that could affect water supply.
- **Powerful Protection.** Effectively deactivates chlorine-resistant parasites such as Cryptosporidium and Giardia, harmful bacteria like E. coli, and viruses that are invisible to the naked eye.
- **Chemical-Free Treatment.** Provides safe, clean water without the use of harsh chemicals, leaving no taste, odour or by-products behind.
- **Compact and Easy to Install.** Fits neatly into your existing water system without requiring much space. Simple enough for quick, hassle-free installation.
- **Low Maintenance.** Simple to operate and easy to service, with quick lamp replacement and minimal upkeep.

UV Applications

Effective Solutions Across Industries and Homes

Agriculture

Dairy Farms

Food & Beverage Processing

Healthcare Facilities

Hospitality Industry

Commercial Buildings

Rainwater Harvesting

Residential Water Treatment

Is your well water truly safe?

Your well water quality is always changing, even if you can't see it. Snowmelt, heavy rains, changes in land use, or even a leaking septic system can alter your water quality and jeopardise your health overnight. While annual testing is vital, a proactive approach is best.

Unlike mains water, your private well isn't routinely treated for harmful microorganisms. Clear water can still harbour invisible bacteria (Cryptosporidium, Giardia, E.coli etc.) **viruses and parasites** that cause serious illness. **UV** ensures microbiological safety without adding anything to your water supply.

VIQUA UV systems eliminate common water-borne pathogens, including those resistant to chlorine disinfection, making UV treatment an effective alternative*:

- **Cryptosporidium** – a chlorine-resistant parasite causing diarrhoea
- **Giardia lamblia (beaver fever)** – a protozoan parasite a parasite causing diarrhoea, cramps, and nausea. Often found in untreated surface water.
- **E. coli** – bacteria that can cause severe gastrointestinal illness and kidney complications. Indicator of fecal contamination.
- **Faecal coliforms** – bacteria indicating possible contamination.
- **Campylobacter jejuni** – bacteria causing diarrhoea, fever, and cramps. Common in contaminated water or food.
- **Legionella pneumophila (Legionnaires' disease)** – bacteria that can lead to severe pneumonia. Found in water systems like hot water tanks or cooling towers.
- **Salmonella spp.** – bacteria causing diarrhoea, fever and abdominal cramps. Common in contaminated food and water.
- **Shigella spp.** – bacteria causing shigellosis, leading to diarrhoea (sometimes bloody), fever, and stomach cramps. Highly infectious.
- **Norovirus** – a virus causing acute gastroenteritis (vomiting, diarrhoea). Highly contagious and common in contaminated water or food.
- **Enterovirus** – a group of viruses including poliovirus, coxsackievirus and echovirus, which can cause mild gastrointestinal illness or more serious conditions like meningitis.
- **Hepatitis A virus** – a virus causing liver infection, leading to jaundice, fatigue and nausea. Spread via faecal contamination in food or water.

**Efficacy of VIQUA UV systems has been demonstrated in internal testing using surrogate organisms, specifically MS2 Phage. MS2 is a well-documented surrogate organism that is accepted in the water treatment industry in the design and testing of UV systems being used to treat Cryptosporidium and Giardia.*

Do I need to check my water quality before introducing a UV system?

Yes. To ensure your UV system works effectively, your water must meet these standards:

- **Iron: < 0.3 mg/L** High iron can cause rust coloured stains, build-up and coat the UV lamp, reducing effectiveness
- **Manganese: < 0.05 mg/L** Can cause black stains and affect UV performance if it deposits on plumbing or the lamp sleeve
- **Hardness: < 120 mg/L** Hard water forms scale on the lamp and plumbing, lowering efficiency
- **Tannins: < 0.1 mg/L** These natural organic compounds can colour water and absorb UV light
- **Turbidity: < 1 NTU** Cloudy water blocks UV light, preventing proper disinfection

IMPORTANT!
To ensure effective pathogen eradication, VIQUA UV systems require annual service, proper pre-treatment and consideration of the feed water quality.

Tip: Unsure about your water quality? Have it tested by a certified lab before installing a UV system.

REMEMBER: Just because water is visibly clear DOES NOT mean that it is clean or safe to drink!

When safety matters, choose VIQUA

When it comes to water safety, the brand you choose matters. VIQUA UV systems and lamps are made in Canada and meet the highest production standards. Each unit is rigorously tested and backed by ongoing research. With key certifications like NSF/ANSI Standard 55 (Class A), VIQUA offers proven reliability and long-term performance. For something as important as your family's health, trust a certified brand you can count on.

Certification

VIQUA UV disinfection systems are WRAS approved, ensuring full compliance with UK water regulations and widely recognised standards in Ireland. This certification confirms that all components in contact with drinking water are safe and that each system meets the highest standards of performance, safety and material quality.

WRAS Certificate

NSF/ANSI 55 Certified – Proven Microbiological Protection

VIQUA UV disinfection systems are tested and certified to NSF/ANSI Standard 55 for ultraviolet microbiological water treatment systems. This certification confirms that the UV units effectively reduce bacteria, viruses and protozoa in drinking water to safe levels. It provides independent assurance of disinfection performance, electrical safety and structural integrity, ensuring reliable protection for homes, businesses and farms.

NSF listing page for VIQUA

Are non-genuine replacements worth the risk?

No! VIQUA lamps and parts are specifically designed, tested and certified for your system.

- **Damage to control module**
  Non-genuine lamps have been shown to damage the control module of VIQUA UV equipment, leading to increased service calls and even complete system failure.
- **Loss of warranty**
  VIQUA systems are only warranted when all components - including lamps - are genuine VIQUA parts. Using substitutes voids that warranty.
- **Inconsistent water quality**
  Generic lamps may not deliver the UV dosage needed to inactivate harmful microbes, risking untreated water.

VIQUA UV lamp service video instructions

- **Fire & electrical hazards**
  Genuine VIQUA lamps use non-flammable materials and meet strict safety specifications. Off-brand lamps may employ substandard materials, increasing fire or electrical risks.
- **Compromised certifications**
  VIQUA units (as a complete system) hold third-party certifications-NSF/ANSI 55, UL/CE, CSA that apply only when genuine lamps are installed. Substitutes void those certifications.
- **Reduced reliability and premature failures**
  Only VIQUA supplied lamps undergo full 9,000 hour lifespan testing and strict quality control. Non-genuine parts can lead to erratic performance and early component failure.

UV System Selector

US G/PM (l/pm)	UV Dose @ 95% UVT	
	30 mJ/cm² (standard)	40 mJ/cm² (higher)
1 (4)	**VH150**	**VH150**
2 (8)		
3 (11)		
4 (15)		
5 (19)		**VH200**
6 (23)	**VH200**	
8 (30)		
10 (38)		**VH410; VH410M**
12 (45)	**VH410; VH410M**	
14 (53)		
16 (60)		**VP600; VP600M**
18 (68)		
20 (76)	**VP600; VP600M**	
22 (83)		**VP950; VP950M**
24 (90)		
26 (98)		
28 (106)	**VP950; VP950M**	
30 (113)		
32 (121)		

THE VIQUA **VH-SERIES**

The VIQUA VH Series is designed as the foundational, economical and dependable choice, primarily serving general residential whole-home water treatment needs.

RESIDENTIAL ECONOMICAL

- **Economical and reliable**
- **High UV output lamp**
- **Good value for money**

- **VH150** - 5 US GPM
- **VH200** - 8 US GPM
- **VH410** - 15 US GPM
- **VH150WR*** - 5 US GPM
- **VH200WR*** - 8 US GPM
- **VH410WR*** - 15 US GPM

Lamp Lifespan: 12 months (9,000 hours)

Key Monitoring Features: Audible/digital timer, lamp failure alarm

Lamp Technology: High UV Output Lamp. Countdown timer & audible alarm, the constant current feature ensures stable UV lamp output, regardless of power fluctuations.

KEY FEATURES

- **Simple Maintenance**. Easy-access design for quick lamp replacement.
- **Durable Construction**. Stainless-steel chamber resists corrosion and UV degradation.
- **Safety Features**. Safety-Loc™ connector with interlock cuts power before lamp removal.
- **Essential Monitoring**. Controller with visual lamp-life display and audible alarm on lamp failure.

Stock Code	Item	Flow Rate (US GPM/UK GPM)	Disinfection Performance (95% UVT)**	Connection Size	Household Size Guide (people)	Length (mm)	Power (w)	Weight (kg)
1092698	VH150/VH150WR*	5 US / ~4.17 UK	30 mJ/cm²: 5 US GPM (19 LPM) (1.1 m3/hr)	¾ / 1"	1–3	330	32	3.6
1092699	S150RL-HO lamp					250	22	
1092700	QS Quartz Sleeve		40 mJ/cm²: 3.5 US GPM (13 LPM) (0.8 m3/hr)			282		
1075986	VH200/VH200WR*	9 US / ~7.5 UK	30 mJ/cm²: 9 US GPM (34 LPM) (2.0 m3/hr)	1"	4–6	450	35	5.4
1010188	S200RL-HO Lamp					300	25	
1010211	QS-001 Quartz Sleeve		40 mJ/cm²: 7 US GPM (26 LPM) (1.6 m3/hr)			330		
1016300	VH410/VH410WR*	18 US / ~15 UK	30 mJ/cm²: 18 US GPM (70 LPM) (4.2 m3/hr)	1"	7+	596	60	7.7
1016308	VH410 UV Lamp (S410RL-HO)					450	46	
1016310	QSO-410 Quartz Sleeve		40 mJ/cm²: 14US GPM (54 LPM) (3.3 m3/hr)			540		
1017418	BA-ICE-CL Compatible with VH150/VH150WR*, VH200/VH200WR*, VH410/VH410WR*							

**WRAS Approved: Units marked VH150WR, VH200WR, VH410WR are certified safe for use with drinking water. Applies to units produced from March 2025.*

***VIQUA's residential units (including Arros and VH series) are rated at 30 mJ/cm², aligning with common residential best practice in Ireland and globally. UV dose of 40 mJ/cm² can be used for larger or commercial applications, or for disinfecting shallow wells, springs, or surface water where protozoa such as Giardia and Cryptosporidium are a concern.*

VH150/VH150WR
c/w ballast BA-ICE-CL

VH200/VH200WR
c/w ballast BA-ICE-CL

VH410/VH410WR
c/w ballast BA-ICE-CL

IMPORTANT!
VH Series UV units must be fitted vertically

WRAS APPROVED PRODUCT

THE VIQUA **ARROS-SERIES**

The VIQUA Arros Series is engineered as a modern, high-performance solution for whole-home water disinfection, combining advanced UV technology with streamlined installation, intuitive monitoring, and low-maintenance design to meet the needs of today's busy households.

RESIDENTIAL ADVANCED

- **Innovative design**
- **Upgraded functionality**
- **Vertical and horizontal installation**

- **ARROS 9** - 9 US GPM
- **ARROS 15** - 15 US GPM
- **ARROS 22** - 22 US GPM

Lamp Lifespan: Approximately 12 months (9,000 hours)

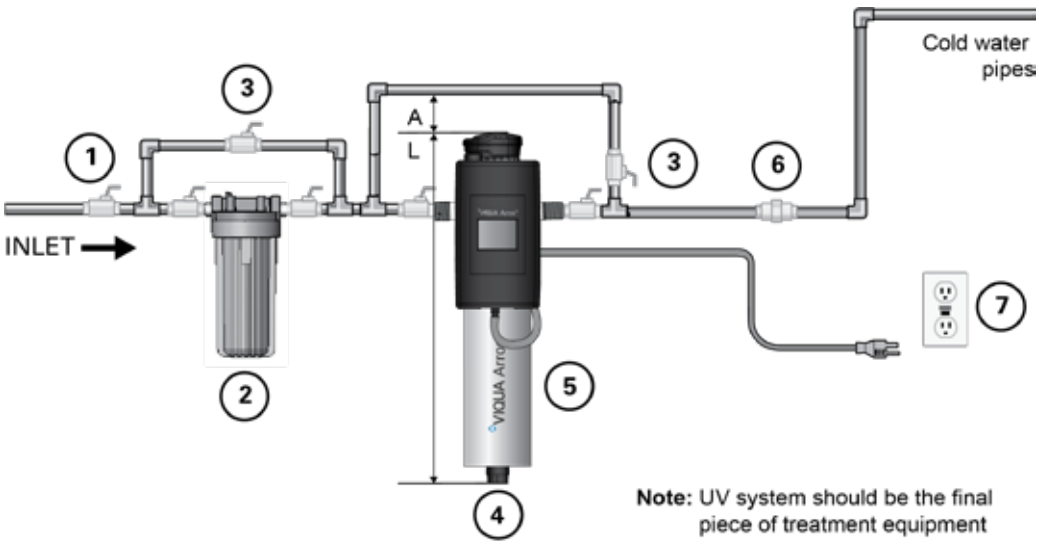
Key Monitoring Features: Integrated LCD touchscreen that displays a countdown, lamp running time, installer information, and contacts, as well as built-in audible and visual alarms.

Lamp Technology: High UV output, low-pressure amalgam lamp integrated with quartz sleeve in a single component for simplified maintenance and reliable microbial disinfection.

KEY FEATURES

- **Simplified Installation**. The Tidal™ chamber aligns the inlet and outlet ports on a single plane for easy plumbing and lower pressure drop. PolyProtect™ shield blocks UV light so the Arros UV can plumb directly to PEX and other polymer materials.
- **Easy Maintenance**. One-piece lamp + quartz sleeve replacement;
- **Modern Design**. Compact SS304 stainless steel chamber with integrated, space-saving controller design. Reduced chamber size with increased UV dose efficiency
- **Reliable Performance**. High-output amalgam lamp with Stream™ Technology with modern electronics for more stable output over time.
- **Essential Monitoring**. Controller with visual lamp-life display and audible alarm on lamp failure.

Stock Code	Item	Flow Rate (US GPM/UK GPM)	Disinfection Performance (95% UVT)	Connection Size	Household Size Guide	Chamber Length (mm)	Power (w)	Weight (kg)
1236768	ARROS 9	9 US (~7.5 UK)	30 mJ/cm^2: 9 US GPM (34.1 L/min); 2.0 m^3/hr	¾ / 1"	1-5 people	284	33	5.44
1238130	(VA9LU Lamp & Quartz sleeve)		40 mJ/cm^2: 7 US GPM (26.5 L/min); 1.59 m^3/hr				25	
1236767	ARROS 15	15 US (~12.5 UK)	30 mJ/cm^2: 15 US GPM (56.8 L/min); 3.41 m^3/hr	¾ / 1"	6-9 people	420	46	6.8
1238138	(VA15LU Lamp & Quartz sleeve)		40 mJ/cm^2: 12 US GPM (45.4 L/min); 2.73 m^3/hr				38	
1236769	ARROS 22	22 US (~18.3 UK)	30 mJ/cm^2: 22 US GPM (83.3 L/min); 5.0 m^3/hr	¾ / 1"	10+ / light commercial	572	60	8.16
1238139	(VA22LU Lamp & Quartz sleeve)		40 mJ/cm^2: 16 US GPM (60.6 L/min); 3.63 m^3/hr				52	
1238141	VA-CTRL Ballast compatible with ARROS 9, ARROS 15, ARROS 22							



WRAS APPROVED PRODUCT

THE VIQUA **PRO-SERIES**

The **VIQUA PRO Series** is engineered as a trusted, high-performance water disinfection solution, combining advanced UV technology with third-party validation and certifications, including **NSF/ANSI Standard 55, Class A** - the highest level under this standard - ensuring the system reliably inactivates microbiological contaminants with a **UV dose of 40 mJ/cm².**

Powered by UVMAX™

NSF C US

System Tested and Certified by NSF International against CSA B483.1 and NSF/ANSI 55 for Disinfection Performance, Class A

Lamp Lifespan:
Up to 2 years

VALIDATED LIGHT COMMERCIAL

- **Light commercial, high-flow residential**
- **NSF 55 Class A certification for regulated applications**
- **Advanced monitoring and extended lamp life**

- **PRO 10** - 10 US GPM
- **PRO 20** - 20 US GPM
- **PRO 30** - 30 US GPM

KEY FEATURES

- **UV Intensity Monitoring** – continuously measures UV output to ensure the system is delivering the required disinfection dose.
- **Flow Rate Monitoring** – tracks water flow to verify that disinfection performance matches demand.
- **Lamp Life Countdown** – real-time lamp replacement reminders with hour counters.
- **Temperature and System Alarms** – visual and audible alerts if operating conditions fall outside safe limits.
- **Compliance Alarms & Data Logging** – alerts for dose interruption and built-in event logging to meet regulatory reporting requirements.
- **LightWise™ technology** across models means 30% energy savings*.

**(In normal usage, water often does not flow for up to 60% of the day. During these periods, UV lamps can heat water in the chamber to 55°C, accelerating sleeve fouling. VIQUA LightWise technology reduces lamp power during no-flow periods, keeping water below 40°C, cutting sleeve fouling by up to 60% and potentially doubling the time between cleaning cycles, while saving an estimated 30% energy.)*

These features make the PRO Series suitable for regulated environments like schools, healthcare facilities, small community water systems, and commercial applications.

Stock Code	Model	Flow Rate (US GPM/UK GPM)	Disinfection Performance (70% UVT)	Connection Size	Chamber Length (cm)	Power Consumption (w)	Weight (kg)
1010231	PRO 10	10 US (~8.3 UK)**	40 mJ/cm^2 at 10 GPM (≈38 L/min)	1¼"	54	120	11.3
1010235	Lamp						
1010240	Quartz Sleeve						
1010232	PRO 20	20 US (~16.6 UK)**	40 mJ/cm^2 at 20 GPM (≈76 L/min)	1¼"	78	160	12.7
1010237	Lamp						
1010242	Quartz Sleeve						
1010233	PRO 30	30 US (~25 UK)**	40 mJ/cm^2 at 30 GPM (≈113 L/min)	1¼"	103	230	14
1010243	Quartz Sleeve						
1010238	Lamp						
1010234	PRO 50	50 US (~41.6 UK)***	40 mJ/cm^2 at 50 GPM (≈189 L/min)	2"	103	230	14
1010238	Lamp						
1010243	Quartz Sleeve						

*** Rated flow for NSF/ANSI Std 55, Class A*

**** Rated flow for USEPA*

VIQUA's PRO Series is also validated to USEPA UV disinfection requirements (United States Environmental Protection Agency), providing verified performance for safe drinking water. The PRO Series is designed for continuous monitoring and dependable operation.

STANDARD INTEGRATED UV KIT

Plug-and-play disinfection pack built around the reliable **VIQUA VH Series** UV units (for small ➜ large homes). Supplied pre-assembled on a backboard with a **10” clear pre-filter bowl** and a **PP 5-micron sediment cartridge** installed upstream of the UV chamber. Designed to protect the UV sleeve and lamp, extend service life and deliver clearer, safer water.

VH150 KIT - 5 US GPM

VH200 KIT - 8 US GPM

VH410 KIT - 15 US GPM

EASY TO INSTALL

- Integrated sediment prefiltration
- Cost-effective
- Easy maintenance
- Easy installation

KEY FEATURES

- **VIQUA VH Series UV unit** - available in 5/8/15 US GPM flow models.
- **10” clear pre-filter housing** with **PP 5 µm sediment cartridge** (upstream of the UV unit).
- **Backboard** with printed labels, safety warnings and QR codes linking to manuals, spare parts lists and step-by-step mounting / lamp change videos.
- **High working pressure** capability - up to ≈ **8.6 bar**.
- **Easy service:** quick-release bowl for fast cartridge changes and lamp replacement reminders on the VH controller where fitted.

How it works

Stage 1. Fine Sediment Removal
A 5 µm PP sediment cartridge removes dirt, rust, debris and suspended solids that can shield micro-organisms from UV light. Removing these particles preserves UV transmittance and helps protect the UV sleeve from abrasive wear.

Stage 2. UV Disinfection
The VIQUA VH UV chamber deactivates bacteria and viruses in the incoming water supply. The system includes an integral countdown/indicator to show when the UV lamp requires replacement. UV lamps degrade over time and must be replaced every 12 months.

Supplied as a pre-assembled board to simplify plumbing and wiring: mount the board, connect inlet and outlet, fit the sediment cartridge, power the VH controller and scan the QR code for the commissioning video. Routine service is straightforward replace the 5 µm cartridge when visibly loaded, change the UV lamp and sleeve at the recommended interval and follow the on-board safety notices.

Model	Stock Code	5µ Filter (stock code)	UV Lamp (stock code)	UV Sleeve (stock code)	Ballast / Timer (stock code)
5 US GPM system	1092848	1009839	1092699	1092700	1017418
8 US GPM system	1079723	1009839	1010188	1010211	1017418
15 US GPM system	1079731	1009840	1016308	1016310	1017418

Please see table on page 9 for details

INTEGRATED
RAIN FILTER KIT

The Integrated Rain Filter Kit is a pre-assembled, board-mounted water treatment solution designed for premises collecting rainwater. It combines robust 3-stage pre-filtration with UV disinfection as a final stage, to deliver safe, clean water straight from your rainwater system.

Rainwater harvesting systems vary in design and are generally intended for non-drinking usages such as toilets flushing, laundry and showering.

Safe use depends on proper collection, storage, and maintenance. Filters must be replaced on time, UV units serviced regularly and water circulation maintained. Avoiding stagnant water is essential as it can reduce water quality and system effectiveness. The system improves water safety but does not make rainwater guaranteed safe for human consumption.

Tip: Always consult your rainwater harvesting installer regarding their system design and future usage.

EASY TO INSTALL

- **Multi-stage advanced prefiltration**
- **Enhanced UV lamp protection**

- **VH150/2B** - 5 US GPM

KEY FEATURES

- VIQUA VH 150 UV unit for reliable disinfection at 5 US GPM.
- 3-stage 10” pre-filtration: **20 µm string-wound ➜ CTO carbon block ➜ 5 µm string-wound**.
- Neat board mounting with printed labels, safety advice and **QR codes** for manuals, spare-parts lists and video guides.
- Rated to work at pressures up to ≈ **8.6 bar**.
- Easy cartridge replacements, clear housings for quick visual checks and lamp-life indicator on the VH controller where fitted.

How it protects your water

Stage 1. Coarse Sediment Filtration (20 µm)
Removes sand, rust and larger solids that would otherwise wear cartridges and increase pressure drop.

Stage 2. CTO Carbon Block
Reduces organic molecules, volatile organic compounds (VOC) that can interfere with UV transmission or foul the sleeve.

Stage 3. Fine Polishing (5 µm)
Catches remaining fine particles to ensure the water entering the VH unit is as clear as possible for effective disinfection.

Stage 4. UV Disinfection
With the pre-treatment in place, the VH UV unit can reliably eradicate bacteria and viruses. The control unit provides lamp-life information. UV lamps degrade over time and must be replaced every 12 months.

Model	System	20µ Filter	10µ CTO Filter	5µ Filter	UV Lamp	UV Sleeve	Ballast / Timer
VH 150/2B	1201932	1009832	1009672	1009839	1092699	1092700	1017418

MULTIBOOST SNUG
UV EDITION

One compact solution for water pressure and safe, disinfected water

The **Multiboost Snug 355L** was originally designed for understairs spaces, but its versatility makes it the ideal choice for homes, apartments, bungalows and even B&Bs.

Now, with the standard Integrated UV Kit, the system not only guarantees consistent water pressure but also ensures safe, microbiologically disinfected water throughout the property. Built with **premium components from top brands**, it delivers reliability, performance and complete peace of mind.

ALL-IN-ONE SOLUTION

Water Boosting + Disinfection

UV

EASY TO INSTALL

- **STRONG** water pressure
- **SAFE** water at every tap
- **SAVE** space for tight areas

Why does safeguarding stored water matter?

Water stored above c. 20°C can create ideal conditions for bacterial regrowth and in the warm season, water in your booster tank can reach that temperature and higher.

The **Multiboost Snug UV Kit** provides compact, chemical-free disinfection at the point of storage, inactivating microbes before water is pumped to taps. It's a discreet, energy-efficient, low-maintenance, plug-and-play safeguard that reduces microbial risk for homeowners without changing system plumbing.

KEY FEATURES

- Designed for space-saving installations (perfect under stairs)
- Available in 1- or 2-pump options: duty/assist or duty/standby
- Non-corrosive holding tank (WRAS approved material)
- Pre-fitted fill valve & overflow for easy installation
- Built-in electronic controller with dry-run protection and auto-restart
- Removable pump pot & quick-access UV unit for easy maintenance
- Drip tray, insulation jacket and anti-vibration mat available on request
- Built-in VIQUA Standard UV Kit for chemical-free disinfection of bacteria, viruses and protozoa
- User-friendly backboard with labels, safety warnings, and QR codes for manuals and guides
- Fully removable pump and controller for easy maintenance

3 Controller Options For Your System Design

Easypress
(Fixed Speed)

Presflo Multi
(Fixed Speed)

Steadypres
(Variable Speed)

SYSTEM CONNECTIONS

Connection	Size
Inlet	½" BSP
Outlet	1" BSP
Overflow	1" BSP
Drain Off/Gravity	1" BSP

To decipher application requirements for storage tanks with pump and UV systems, please contact your nearest EPS Group branch
epswater.ie/contact

RANGE OPTIONS

Stock Code	Model	Control Type	L (mm)	W (mm)	H (mm)	Weight (kg)
1239221	355L Snug (Simplicity)	Easypress	1200	590	820	29
1239222	355L Snug (Multi)	Multi	1200	590	885	28
1239223	355L Snug (Variable speed)	Steadypres	1200	590	900	30
1092848	5 US GPM UV System	-	160	470	580	6.5
1079723	8 US GPM UV System	-	160	470	580	6.7

Mallow, Co. Cork
022 31200

Ballyhaunis, Co. Mayo
094 9633500

Mountrath, Co. Laois
057 8732279

Naas, Co. Kildare
045 843614

epswater.ie

info@epswater.ie

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Rethinking Water