Uponor

Build on new ways for energy-efficient buildings

Explore the full range of Uponor Combi Port and Aqua Port heat interface units

Time for a turnaround: follow us to the future of domestic hot water generation and heat distribution

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Buildings are responsible for at least 40 % of global energy consumption and over a third of greenhouse gas emissions. That's why new ways of enhancing energy efficiency in buildings are vital in combating humaninduced climate change. Our decentralised Combi Port & Aqua Port heat interface units make a key contribution by supplying on-demand, energyefficient hydronic heating and cooling as well as hygienic hot water.

How you benefit:

- New generation of energy-efficient domestic hot water generation and heating/cooling distribution
- Hygienic hot water generation on demand to avoid legionella growth
- Individually developed & prefabricated heat interface units

* Figures from the United Nations Environment Program's Sustainable Buildings and Climate Initiative

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A new way of thinking: From centralised to decentralised

It's time to rethink the way heat and hot water are supplied in buildings. Unlike traditional centralised systems, Uponor Combi Port and Aqua Port only require heating supply and return to be connected to a centralised heating system. This means you benefit from a decentralised solution that doesn't require a hot water tank, or domestic hot water distribution and circulation system.

For hygiene reasons, the hot water temperature in the tank and distribution lines of a centralised system must be kept at 55-60°C, with even higher temperatures required to heat up the system. Since the decentralised domestic hot water generation and water volumes in the pipe system remain below 3 litres, the temperatures can be kept lower. The supply temperature to the heat exchanger needs to be only 5K higher than the desired domestic hot water temperature. The lower operational temperature and only two heat-emitting pipes ensure significant energy savings.

Hydraulic balancing is also easier and sustainable, while the constantly low return temperatures enhance the efficiency of both traditional and renewable energies.

How you benefit:

- 58 % energy savings in distribution pipes through decentralised heat supply system
- Up to 80 % energy savings in renovation projects (incl. insulation measures)
- Lower investment costs than conventional systems and significantly lower operating costs

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A new way of hygiene: Mastering a critical issue

In 2015 approximately 330,000 cases of water-related diseases were reported in Europe¹, including a fatality rate if 10-15% from legionnaire⁴ disease². As one of the world's leading providers of drinking water systems, Uponor is committed to providing solutions for hygienic drinking water delivery, and our Combi Port and Aqua Port units are integral components what we call **Uponor Hygiene Logic**.

Cold drinking water is delivered to each interface unit and heated on demand to the required temperature by a high-performance heat exchanger. This means there is no need for hot water to be stored in a centralised water tank, thus improving the water exchange rate in the building and minimising the risk of legionella contamination.

And that's just the beginning. Thanks to advanced PM valve technology, Aqua Port and Combi Port ensure the heat exchanger remains cold when not in use, avoiding critical temperatures and possible legionella growth in the system.

How you benefit:

- Hygienic domestic hot water generation
- Instant hot water on demand in each apartment
- Industry-leading Uponor Hygiene Logic

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1 Water Environmental Treatment Ltd. 2 European Center for Disease Prevention and Control

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A faster, easier way to order and install heat interface units

Combi Port PRO – heat interface unit for mid-size and large apartment buildings with advanced components as well as integrated hydraulic balancing valves. Available for radiator application and underfloor heating application.



Combi Port PRO RC

Heat interface unit for radiator application. Also available with return temperature limiter.



Combi Port PRO UFH

Heat interface unit for underfloor heating application. Also available second unmixed heating circuit (can be used in combination with decentralised hot water generation unit Aqua Port Compact).

Uponor Combi Port PRO and BASE units are designed make ordering and installing HIUs as fast and simple as possible. The units are available in two output capacities in 15 or 19 L per minute with choice of copper or diffusion soldered heat exchanger. The units are equipped with highly sensitive PM valve with IPR protected design and safety technology. A domestic hot water temperature limiter is also available as an optional variant.

Uponor Combi Port PRO and BASE are available with either on-wall and in-wall cabinets that are suitable for the demands of almost any project. The in-wall and on-wall cabinets for underfloor heating application are already equipped with the underfloor heating manifolds.

30% 30%



Combi Port BASE

Heat interface unit for radiator application for small apartment buildings (up to 5 flats per riser). Together with additional accessory (cabinet including pump group), the product is also suitable for UFH application. Hydraulic balancing valves and bypass valves need to be considered in riser installation.

DEPTHONLY 110 MM (in-wall mounted cabinet)

Uponor Combi Port and Aqua Port I 9



All the solutions you need, exactly where you need them

Every model in the Uponor Combi Port range meets all standard requirements for residential buildings. Ready for delivery in just a few weeks, the heat interface unit makes projects quicker and more manageable thanks to plug-and-play installation. This also enables you to calculate your prices accurately, and guarantees that all our products are fully tested before delivery.

The fully equipped Uponor Combi Port PRO UFH includes cabinets and controls accessories as well as metering devices.

Superior product features:

- 1 Highly sensitive PM valve with IPR protected design and safety technology
- 2 Hot water on demand and no hot water stored thanks to highly efficient heat exchanger
- 3 Strainer to protect against dirt particles

- 4 Heat losses minimised through thermally decoupled fixations and insulated warm water supply lines
- 5 Integrated Uponor Smatrix Pulse with full smart home connectivity and autobalancing technology for additional comfort and energy efficiency.

Image shows Uponor Combi Port PRO UFH with domestic hot water temperature limiter as well as second unmixed heating circuit (for connecting Aqua Port Compact and / or additional radiator).

Build on quality products – Uponor modular solutions for special project requirements

As well as our comprehensive portfolio of prefabricated units, Uponor can provide you with fully custom-designed solutions, meeting any individual project requirements - no matter how complex the task.



Uponor Combi Port B1000

The fully modular platform with potential applications in domestic hot water generation with a radiator or underfloor heating connection, or combined for radiator and underfloor heating and heating/cooling.



Uponor Combi Port B1000 HY

Hybrid version for low-temperature systems

- Min. supply temperature 35-38° C, constant or flexible up to 60° C
- Simple hydraulics
- Direct underfloor heating feed with no mixing circuit required
- Drinking water temperature adjustable to users' requirements



Uponor Combi Port B1000 3P

Three-pipe station for more efficient heat pump systems

- Two separate supply lines for heating and domestic hot water generation; one common return
- · Simple hydraulics
- Secure hygienic domestic hot water in combination with heat pumps
- Higher COP of the heat pump



Uponor Combi Port T1000

Ideal for replacing gas-fired boilers in apartments

- Quick and easy installation using existing drinking water and heating connections
- Reduced maintenance and operational costs

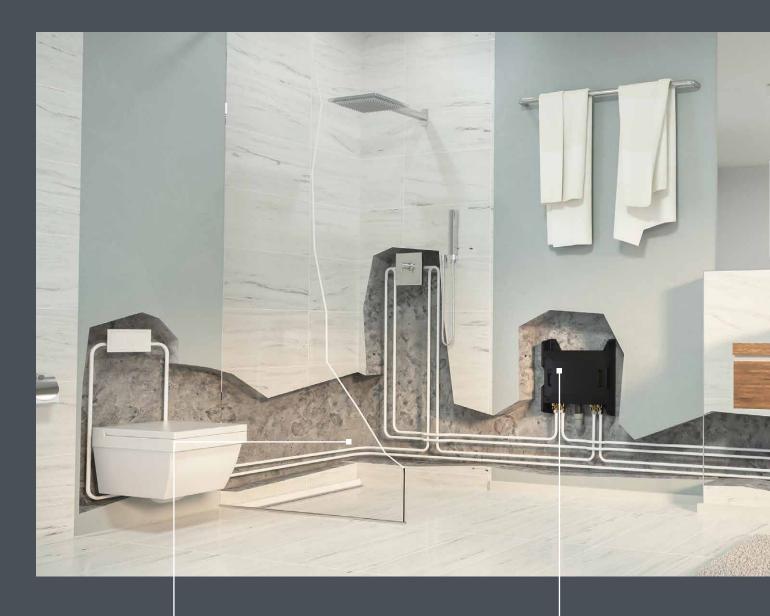


Uponor Aqua Port S1000

Domestic hot water generation

- Hygienic and reliable heating of drinking water
- Combines with all commonly used heating systems
- Compact design enables system to be installed in alcoves and shafts for distribution lines and risers

Combi Port & Aqua Port: Part of Uponor Hygiene Logic



Uponor Uni Pipe PLUS

Ideal for drinking water installations, Uponor's unique multilayer composite-pipe system is unlike any other solution in the industry. Thanks to its flexibility and stability, Uni Pipe PLUS is perfectly suitable for loop installations, and is produced under the strictest hygienic conditions before being hygienically sealed off.

- Up to 40 % narrower bending radius compared to conventional multilayer pipes
- 0 % readjustment pipe stays perfectly in shape after bending
- Up to 15 % less fittings, due to superior pipe flexibility
- 100 % backwards compatibility with Uponor leading multilayer pipes and press fittings

Uponor Smatrix Aqua PLUS

Uponor Smatrix Aqua PLUS is an automatic hygienic flushing system that constantly monitors and regulates the entire drinking water installation in a buildings. It can even be retrofitted in older buildings.

- Assured compliance with hygiene regulations and legal standards
- Seamless monitoring and documentation of the entire drinking water installation
- Immediate notification of abnormalities via e-mail
- No additional software or integration into building automation systems necessary
- Fast and easy installation and smooth operation in every phase



Uponor Aqua Port & Combi Port

Our full portfolio of Uponor heat interface units allow you to heat up your drinking water efficiently using your central heating system. No drinking water storage tank and no domestic hot water distribution network is required. The heat exchanger installed in the unit rapidly heats up the cold drinking water at precisely the moment when the water tap is opened.

Uponor riser installation

To keep the cold water temperature below 25 °C at all times, Uponor riser installations ensure the heating riser won't warm up the cold domestic water riser, thus avoiding the health risks of legionella contamination. As the optimal riser installation method, we recommend installing a mineral wool heat barrier between the cold and hot water risers.

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