



# Aquacomputer Aquastream - Ultimate Version

\$112.99

## Product Images



## Short Description

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The aquastream ULTIMATE has been specifically designed for PC water cooling systems. Design goals such as high performance electronics, integrated fan controller, temperature sensor, OLED display and comprehensive control options were all met during development. And there is one other feature that should be mentioned here - the extremely low noise level of the pump.

- Intelligent pump controller for reduced vibrations and operating noise
- High resolution OLED display and built-in buttons for direct operation without a PC
- Integrated water temperature sensor
- Steplessly adjustable 12 W fan output for analog 3-pin fans or 4-pin PWM fans
- Automatic control of fan output and pump speed with individually adjustable behavior
- aquasuite software for a comfortable setup, evaluation and visualization of all sensor data
- aquabus interface for communication with Aqua Computer devices. When connected to an aquaero, the fan output of the pump can be controlled from the aquaero
- Connector for external temperature sensor
- Connector for external flow sensor
- Alarm output to protect the PC in case of a failure
- Integrated buzzer for acoustic alarm
- USB 2.0 interface
- Firmware update via USB
- 12 V power supply via SATA power connector

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## Features

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### Version history

Since its introduction in 2003, the name aquastream stands for reliable and durable pump technology - made in Germany. The next big step in development was the introduction of the aquastream XT series in 2007, which includes an USB interface and an integrated fan controller with water temperature sensor in the Ultra variant, defying the traditional definition of a pump. The introduction of the aquastream ULTIMATE marks the next evolutionary step, including a newly developed pump controller and an integrated graphic display.

### Proven mechanics

The pump mechanics continue to rely on the time-tested Eheim technology, the bearing made from high performance ceramics has a life expectancy of more than 10 years of continuous operation. To reduce vibration, the ceramic bearing itself is installed in rubber decouplers.

## Enhanced electronics

The core component of the aquastream ULTIMATE controller is a 32-bit DSP microprocessor featuring an USB 2.0 interface. Based on motor parameters monitored 20,000 times a second, pump motor drive is continuously optimized to reduce vibrations and to achieve a nearly noiseless operation. A fan controller with speed monitoring is included in the pump controller, as well as water temperature sensor, alarm buzzer and alarm output. Additionally, an external temperature sensor and an external flow sensor can be processed by the pump controller.

Nearly every function of the pump can be configured and monitored directly at the unit by using the well structured menu on the 128x64 pixels OLED display.

If the pump controller is connected to the PC via USB interface, the pump can also be configured and monitored using the free of charge aquasuite software, which can also be used to perform firmware updates of the pump controller.

## Integrated controller options

The following controller options are invariably available in any aquastream ULTIMATE:

Pump speed: Manual speed setting

Pump speed: Automatic mode for maximum pump speed

Pump speed: Optional pump speed control via aquabus (requires aquaero 5/6 connected to pump controller)

Fan speed: Manual speed setting

Fan speed: Temperature controlled with set point controller

Fan speed: Optional fan speed control via aquabus (requires aquaero 5/6 connected to pump controller)

## Advanced controller package

The advanced controller package can be activated (subject to additional costs) at any time. The feature is temporarily activated during the first 48 hours of operation after purchase of the pump for testing purposes (trial period). The following features are included in the advanced controller package:

Software sensors: Up to two temperature values can be transmitted to the pump controller via USB from the aquasuite software or alternatively via aquabus from a connected aquaero 5/6.

Pump speed: Temperature controlled with curve controller

Pump speed: Temperature controlled with two point controller

Pump speed: Flow rate controlled with set point controller (additionally requires flow sensor connected to pump controller or software extension virtual flow sensor)

Fan speed: Temperature controlled with curve controller

Fan speed: Temperature controlled with two point controller

## Software extension virtual flow sensor

The virtual flow sensor extension can be activated (subject to additional costs) at any time. The feature is temporarily activated during the first 48 hours of operation after purchase of the pump for testing purposes (trial period).

When activated, the pump controller continuously calculates the current flow rate from internally monitored pump parameters. Although this calculated flow rate is not as accurate as a mechanical flow sensor, it is more than sufficient for flow monitoring in a PC water cooling system.

Limitations: Flow rate can not be calculated if a second pump is present in the cooling circuit! Flow rate calculation is calibrated for DP Ultra viscosity and will deviate when using other coolants or pure water!

# Specifications

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## Technical details

- Dimensions without cables or hose connectors: ca. 118 x 75 x 72 mm (L x W x H)
- Supply voltage: 12 V DC
- Power consumption: 3 - 25 W
- Fan output current: 1 A continuously, 1.5 A peak
- Maximum pump pressure: 445 mbar
- Permitted coolant temperature: 0 - 50 °C
- Permitted coolants: DP Ultra, alternatively water with max. 30 % glycol
- Display: White OLED, 128 x 64 pixels

Scope of delivery:

- One aquastream XT USB 12 V pump
- One internal USB cable
- One aquabus/speed signal cable 3-pin
- One ATX adapter for starting the PC power supply unit

Please note:

Connector threads on suction and pressure side are identical to Eheim 1046. A set of adapters and suitable connectors for your hose dimensions are required and not included.

## Additional Information

Brand	Aquacomputer
SKU	AQ-41108
Weight	3.0000
Color	Black
Pump Type	Other
Pump Voltage	12 VDC
Vendor SKU/EAN	4260073419239

