

AquaGem Portable Photometer

- Low cost flexible entry to water testing
- Field or Laboratory use
- Test modules select correct wavelength and calibration data
- Pre-configured or Open Modules
- PC software included



The AquaGem photometer has been designed to complement the Aquanova Environmental Spectrophotometer for users that do not routinely use a broad range of test kits. AquaGem supports the same range of Jenway test kits by using a dedicated module for each test that automatically selects the correct wavelength and calibration data required. Unlike many competitive products that are based on coloured LED technology, the AquaGem optical system has been matched to the Aquanova to ensure improved accuracy and consistency of results between systems. The reverse optical design allows the instrument to be used without closing the protective lid.

The instrument is optimised for simple operation and provides direct concentration readout for the chosen test. Samples can be presented in 24mm or 16mm diameter tubes, as well as standard 10mm and 50mm path length cuvettes. All readings are automatically stored in a non-volatile memory, together with the date and time of the reading. The non-volatile memory holds the last 100 readings (replaced on a first-in-first-out basis). Zero absorbance calibration is performed by pressing the **ZERO** key.

The AquaGem is powered by a low-voltage dc-power supply that operates from a 110-230Vac mains supply. Two AA batteries can also power the instrument allowing typically 500 readings to be taken, making the instrument ideal for both field and laboratory use. An RS232 compatible serial interface is incorporated. The Aquagem is supplied with PC application software that allows results to be managed, as well as development of new applications using the optional blank modules (wavelength specified). A self-diagnostic check is performed after power-on that verifies basic optical performance and system functionality.

Drop-in modules select the wavelength for tests using a high quality interference filter and electronically hold the calibration curve for the test kit, as well as additional parameters such as unit of measurement, display resolution and upper and lower limits for the test.

All of this data can then be retrieved using the PC software (supplied as standard) giving full traceability of results.

The screenshot shows the AquaGem software interface. At the top, there is a blue title bar with the text 'AquaGem'. Below the title bar is a toolbar with various icons. A 'Copy Results' button is highlighted. Below the toolbar, the word 'Results' is displayed. The main area contains a table with the following data:

Concentration	Units	Test	Date	Measuring Rang
4.7	mg/l	Iron	19/05/2005 15:41:46	0.1 - 3
2.0	mg/l	Iron	19/05/2005 15:41:38	0.1 - 3
2.9	mg/l	Iron	19/05/2005 15:41:28	0.1 - 3
2.6	mg/l	Iron	19/05/2005 15:41:19	0.1 - 3
0.4	mg/l	Iron	19/05/2005 15:41:12	0.1 - 3
2.2	mg/l	Hydrogen Peroxide ...	19/05/2005 15:40:40	0.5 - 1.5
1.0	mg/l	Hydrogen Peroxide ...	19/05/2005 15:40:32	0.5 - 1.5
1.1	mg/l	Hydrogen Peroxide ...	19/05/2005 15:40:24	0.5 - 1.5
0.8	mg/l	Hydrogen Peroxide ...	19/05/2005 15:40:13	0.5 - 1.5
0.0	mg/l	Hydrogen Peroxide ...	19/05/2005 15:40:03	0.5 - 1.5
3.5	mg/l	Bromine	19/05/2005 15:39:31	0.1 - 6.5
5.1	mg/l	Bromine	19/05/2005 15:39:19	0.1 - 6.5

Technical Specification

Wavelength Selection:	Drop-in interference filter
Wavelength Accuracy:	±2nm (typical)
Spectral Bandwidth:	10nm (typical)
Measuring Ranges:	-1.00 to 3.00A 0 to 199.9%T 0 to 1999 mg/l, g/l, ppm, µg/l
Resolution:	0.01A 0.1%T 0.1, 0.01 on concentration
Photometric Accuracy:	±0.02A @ 1.0A (measured at 520nm with neutral density filter)
Size:	210 x 205 x 110mm
Weight:	1Kg

Order Code

603 401

AquaGem Photometer supplied with 9 way serial cable, universal mains adapter with UK, US & EU leads, PC Application Software on CD-ROM, operating instructions and 2 x AA batteries (fitted).



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.