



Automated wet chemical analysis

Gallery Aqua Master discrete analyzer

Fully-automated photometric water and nutrient analyzer

The Thermo Scientific™ Gallery™ Aqua Master is a fully-automated, discrete photometric analyzer dedicated for water and nutrient analysis. Many different applications can be run simultaneously from a single sample. Panels of system applications are predefined into the analyzer for water and environmental quality control and testing. Complicated spiking, calibration sequences, and quality control procedures can be fully automated to meet requirements of local regulatory approved test methods. Moreover, new user-specific applications can be defined.

The Gallery Aqua Master analyzer employs colorimetric end-point and kinetic, as well as turbidimetric and bichromatic reactions, with or without sample blanking. The system supports automated standard addition measurement method for complex sample matrices. The optional electrochemical measurement (ECM) unit uses pH glass electrodes for pH measurement. The ECM unit is also capable of conductivity measurement.

Measurement

Single channel interference filter photometer with beam splitting reference, 12 filter positions.

Filter range	340–880 nm
Incubation temperature	Controlled at 25–60 °C, no cooling, preset to 37 °C
Light source	Xenon flash lamp
Absorbance range	0–3.5 A, resolution of 0.001 A, reproducibility of SD <0.005 A at 2 A

Optional ECM unit for simultaneous measurement of pH and conductivity parallel to photometric measurements.

pH range	2–12 pH
Conductivity range	20 μ S/cm–112 mS/cm
ECM tests per hour	Up to 54

Reaction vessels

Thermo Scientific™ DECACELL™ discrete disposable cuvettes.
 Continuous access to cuvettes without interrupting test processing.

On-board capacity	360 measurement cells, 36 cuvettes with 10 reaction cells, up to 2 hours walk-away time depending on workload
Reaction end volume	120–300 µL

Samples and reagents

Continuous access to samples and Thermo Scientific™ Gallery™ system reagents without interrupting test processing. Automatic identification via internal barcode reader. Clearly displayed real-time reagent volume and remaining test capacity. Up to four reagent additions per test.

On-board capacity	9- or 18-position sample rack, 6-position reagent rack, max. 6 racks in the cooled disk
Sample volumes	2–120 µL, possibility to extend up to 240 µL
Sample containers	0.5 mL, 2.0 mL, 4.0 mL cups and sample tubes (diameter 12–16 mm, length 75–100 mm)
Sample barcodes*	Code 128 and barcodes USS Codabar, Interleaved 2 of 5 and Code 39 with a check digit
Reagent volumes	2–240 µL
Reagent containers	10 mL and 20 mL vials
Sample and reagent dispensing	CV ≤2% for volumes ≥2 µL

*Used with sample tubes in a 9-position sample rack.

Calibration

Factor, bias, linear, logit-log, spline, second order, and point-to-point calibration. Method-dependent use of individual calibrators or automatically diluted series from a stock calibrator. Previous curve comparison available.

Quality control

Real-time QC program with multiple, user-definable Westgard rules. Control frequency user-definable. Out-of-specification control results flagged. QC chart printouts, daily and cumulative reports.

Dilutions

Automatic sample pre-dilution. Automatic dilution of over-range tests with automatic rerun. Addition of manual pre-dilution value for result calculation.

Data management

Microsoft® Windows® 10 workstation with graphical user interface. Data input online, via mouse, touchscreen, keyboard, and barcode reader. Different user groups can have different access rights. Different user interface language versions available.

LIS interface	CLSI LIS02-A2
Hardware interface	RS-232 or TCP/IP
Result reports	Collated by sample, manual entry of off-line results allowing for fully-collated result reports, results calculated from both measured and off-line results. Spreadsheet reporting for further calculations possible.
Traceability	Full traceability with long term storage of results including associated calibrations and reagent lot data.
Capacity	Up to 200 tests/hour with one-reagent method.
Dimensions and weight	75 cm (width) × 70 cm (depth) × 62/130 cm (height/with open cover), 85 kg (weight). Separate workstation.
Power requirements	100–240 VAC ±10%, 50–60 Hz ±5%, 250 W
Deionized water consumptions	1.5 litres/ hour
Average noise level at 1 meter	<60 dB(A)
Environmental conditions	Operating temperature range of 18–30 °C, humidity 40–80% (non-condensing)
Regulatory	Conforms to <ul style="list-style-type: none"> CAN/CSA-C22.2 No. 61010-1-12, 61010-2-081:15, 61010-2-010:15 UL Std. No. 61010-1:2012, 61010-2-081:2015, 61010-2-010:2015 FCC CFR 47 Part 15, subpart B 2011/65/EU RoHS Directive 2006/42/EC Machinery Directive 2014/30/EU Electromagnetic Compatibility (EMC) Directive
Ordering codes	98610005 Gallery Aqua Master discrete analyzer 98611005 Gallery Aqua Master discrete analyzer with ECM unit

Learn more at [thermofisher.com/AquaMaster](https://www.thermofisher.com/AquaMaster)

General Laboratory Equipment – Not For Diagnostic Procedures. © 2022 Thermo Fisher Scientific Inc. All rights reserved. Microsoft and Windows are registered trademarks of Microsoft Corporation. All other trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. This information is presented as an example of the capabilities of Thermo Fisher Scientific products. It is not intended to encourage use of these products in any manner that might infringe the intellectual property rights of others. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. **PS001499-EN 1222M**