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Data Sheet
August 13, 2026

STANFORD RESEARCH

Stanford Research QMS200

Stanford Research Systems QMS200 Residual Gas Analyzer / High Pressure Gas Analyzer The SRS QMS200 is the 200 amu member of the QMS Series transportable high-pressure gas analyzers. A two-stage capillary inlet samples gases from about 10 mbar to greater than 1 bar whileaquadrupole residual gas analyzer operates at high vacuum (about 5e-6 mbar). Faraday cup and optional electron multiplier detectors provide less than 1 ppm detection (multiplier) and better than 0.5 amu resolution at 10 % peak height. Response time is less than 0.5 s (manual also lists less than 400 ms). Hybrid turbomolecular/drag and diaphragm pumps are built in. The SRS QMS200 is the 200 amu member of the QMS Series transportable high-pressure gas analyzers. A two-stage capillary inlet samples gases from about 10 mbar to greater than 1 bar whileaquadrupole residual gas analyzer operates at high vacuum (about 5e-6 mbar). Faraday cup and optional electron multiplier detectors provide less than 1 ppm detection (multiplier) and better than 0.5 amu resolution at 10 % peak height. Response time is less than 0.5 s (manual also lists less than 400 ms). Hybrid turbomolecular/drag and diaphragm pumps are built in. On-line process-gas monitoring; leak detection; atmospheric and near-atmospheric sampling; replacing batch gas-chromatograph sampling with continuous spectra; portable residual-gas analysis.

MODEL **Stanford Research QMS200**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **QMS200**	LISTING **https://aumictechlabs.com/products/qms200-2/**

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This unit

The Stanford Research QMS200 is a residual gas analyzer (RGA) engineered for high-pressure sampling and continuous on-line monitoring of trace gases in vacuum systems. It delivers precise detection and quantification across a mass range to 200 amu, with sub-second response time and a 6-decade dynamic range. The instrument combines a two-stage pressure-reducing inlet system with hybrid oil-free pumping to enable operation from atmospheric pressure down to the low 10^{-6} mbar range, making it ideal for leak detection, vacuum system diagnostics, and gas purity verification.Technical Specifications Mass range: up to 200 amu Pressure range: 10 mbar to 1 bar inlet; operating pressure down to 5×10^{-6} mbar Mass resolution: better than 1 amu Response time: less than 0.5 seconds Dynamic range: 6 decades Detection limit: less than 1 ppm Sampling flow rate: several milliliters per minute Spectral scan rate: complete spectra in seconds Mass measurement rate: up to 25 points per second Start-up time: approximately 5 minutes Maximum ambient temperature: 35 °C Power: 110 VAC/60 Hz or 220 VAC/50 Hz (not field selectable) Computer interface: RS-232, 28.8 kbaud, DB9 connectorKey Features Two-stage capillary inlet system reduces high inlet pressures to RGA operating range Capillary materials: stainless steel or PEEK Hybrid turbomolecular/drag pump with integral diaphragm pump; both oil-free Compact, transportable design - operates upright or on its side Dimensions: 7.06" W × 17.25" D × 24.80" H; weight 75 lbs Continuous data acquisition with real-time spectral recordingTypical Applications Leak detection in vacuum systems Trace gas monitoring and analysis Gas purity verification Residual gas composition measurementCompatibility & Integration Optional high-vacuum 2.75" CF port for direct RGA access RGA Windows software with analog/histogram scan modes, pressure-vs.-time plotting, leak detection, gas library, and audio/visual alarms High-level ASCII command set and LabVIEW driver for custom integration

Features & description

From manufacturer datasheet

Features

• 1 to 200 amu quadrupole (QMS100 is 100 amu; QMS300 is 300 amu) • Capillary inlet in stainless steel, PEEK, or glass-lined plastic (manual) • Flow 1 to 10 mL/min at atmospheric pressure • Six decades of dynamic range; analog, histogram, P vs t, leak, and annunciator modes • RS-232C at 28800 baud with RGA Windows software • Compact 75 lb transportable package; about 5 minute start-up from full stop (catalog)

QMS200 Characteristics / Specifications

PARAMETER	VALUE
Model	QMS200
Manufacturer	Stanford Research Systems
Instrument Type	High Pressure Gas Analyzer / Residual Gas Analyzer
Series	QMS 100/200/300
Alias	QMS200; SRS QMS200
Mass Range	1 to 200 amu
Mass Filter Type	quadrupole
Detector Types	Faraday cup standard; electron multiplier optional
Resolution	better than 0.5 amu at 10 % of peak height
Detection Limit Catalog	less than 1 ppm
Detection Limit Faraday	less than 10 ppm (manual)
Detection Limit Multiplier	less than 1 ppm (manual)
Analyzer Operating Pressure	5e-6 mbar
Inlet Type	capillary (stainless steel and PEEK; manual also lists glass-lined plastic)
Inlet Flow Rate	1 to 10 milliliter per minute at atmospheric pressure
Inlet Pressure Range	10 mbar to greater than 1 bar (depending on capillary)
Response Time Catalog	less than 0.5 s
Response Time Manual	less than 400 ms
Individual Mass Rate	up to 25 points per second
Inlet Fitting	1/4 inch Ultra-Torr
Exhaust Fitting	1/4 inch Swagelok tube adapter (manual)
Computer Interface	RS-232C, 28800 baud, DB9
Software	RGA Windows application
High Vacuum Pump	hybrid turbomolecular/drag, 70 L/s (manual)
Turbo Ultimate Pressure	2e-9 mbar (manual)

PARAMETER	VALUE
Diaphragm Ultimate Pressure	less than 1 mbar (manual)
Construction Materials	SS304 and SS316
Insulators	alumina, ceramic
Seals	Viton, buna-N, and nitrile butyl rubber
Startup Time Catalog	5 minutes from full stop
Startup Time Manual	2 minutes from full stop
Maximum Ambient Temperature	35 C
Protection Class	IP44 (manual)
Line Power	110 VAC 60 Hz or 220 VAC 50 Hz (not field selectable)
Power Consumption	less than 600 W total (manual)
Catalog Dimensions	8.0 in x 17.0 in x 24.0 in WHL (product page); 7.06 in x 17.25 in x 24.80 in WHD (catalog)
Manual Dimensions	44 cmHx 20 cmWx 61 cm D (17 inHx 8 inWx 24 in D)
Weight	75 lbs (34 kg)

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

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Optional Direct RGA Port: 2.75 inch CF high-vacuum port

Notes
Specs from SRS QMS product page, QMSc catalog, and QMS manual. QMS200 is the 200 amu sampling system (not an RGA100 UHV probe). Confirm Faraday versus electron-multiplier detector, capillary type, and 110/220 VAC build. Startup time differs between catalog (5 min) and manual (2 min).

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

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