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**Data Sheet**
August 13, 2026

STANFORD RESEARCH SYSTEMS

# Stanford Research CIS300

Stanford Research Systems CIS300 Closed Ion Source Quadrupole Gas Analyzer The SRS CIS300 is the 300 amu closed-ion-source quadrupole gas analyzer for direct measurement of trace impurities in process gases at pressures up to 10 mTorr. A high-conductance closed ion source (electron-impact, gold-plated SS304) operates in CIS mode (typically 0.05 mA emission) or open RGA mode (typically 0.5 mA). Faraday cup and electron multiplier detectors are standard on the CIS series ordering configuration. Probe mounts on a 2.75 inch CF flange; the electronics control unit separates for bakeout to 300 C. The SRS CIS300 is the 300 amu closed-ion-source quadrupole gas analyzer for direct measurement of trace impurities in process gases at pressures up to 10 mTorr. A high-conductance closed ion source (electron-impact, gold-plated SS304) operates in CIS mode (typically 0.05 mA emission) or open RGA mode (typically 0.5 mA). Faraday cup and electron multiplier detectors are standard on the CIS series ordering configuration. Probe mounts on a 2.75 inch CF flange; the electronics control unit separates for bakeout to 300 C. Process-gas impurity monitoring at mTorr pressures; verification of process chambers; RGA-mode UHV residual-gas scans; semiconductor and vacuum-process equipment qualification.

| | |
|---|---|
| MODEL<br>Stanford Research Systems CIS300 | CALIBRATION<br>Available on request |
| CONDITION<br>Used | STATUS<br>In stock |
| RFQ / SKU<br>CIS300 | LISTING<br>https://aumictechlabs.com/products/cis300-2/ |

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## This unit

The Stanford Research Systems CIS300 is a quadrupole mass analyzer designed for precision mass spectrometry analysis. Operating across a mass range of 1 to 300 amu, the CIS300 delivers accurate ion detection and quantification in laboratory and analytical environments. This instrument integrates into the Closed Ion Source Gas Analyzer series, enabling reliable molecular and elemental composition measurement for research and quality control applications.Technical Specifications Mass range: 1 to 300 amu Analyzer type: Quadrupole mass analyzerKey Features Closed ion source design minimizes contamination and extends instrument lifetime Quadrupole filtering enables high mass resolution within the specified range Wide mass range coverage from light isotopes to heavier molecular ionsTypical Applications Gas analysis and composition measurement Residual gas analysis Molecular identification in closed systems Mass spectrometry research and analytical workflowsCompatibility & Integration The CIS300 integrates as a component within the Stanford Research Systems Closed Ion Source Gas Analyzer product line, supporting modular configuration for diverse analytical requirements.

## Features & description

From manufacturer datasheet

### Features

• Mass range 1 to 300 amu (CIS100 is 100 amu; CIS200 is 200 amu) • CIS and RGA operating modes with programmable electron energy 25 to 105 eV • Better than 0.5 amu resolution at 10 % peak height (AVS 2.3) • Field-replaceable tungsten or ThO2/Ir filament with firmware protection • RS-232C 28800 baud and Windows RGA application • 24 VDC at 2.5 A; optional AC power module

## CIS300 Characteristics / Specifications

| PARAMETER | VALUE |
|---|---|
| **Model** | CIS300 |
| **Manufacturer** | Stanford Research Systems |
| **Instrument Type** | Closed Ion Source Quadrupole Gas Analyzer |
| **Series** | CIS100/CIS200/CIS300 |
| **Alias** | CIS300; CIS300/1; SRS CIS300 |
| **Mass Range** | 1 to 300 amu |
| **Ion Source Type** | high conductance closed ion source |
| **Mass Filter Type** | quadrupole, cylindrical rods 0.25 in diameter, 4.5 in length |
| **Detector Type** | Faraday cup standard; electron multiplier (CDEM) optional/included on CIS-with-multiplier configurations |
| **Resolution** | better than 0.5 amu at 10 % peak height; adjustable to constant peak width |
| **Maximum Operating Temperature** | 70 C |
| **Bakeout Temperature** | 300 C without ECU (manual also lists 350 C FC / 300 C CDEM max bake) |
| **Recommended Bakeout Temperature** | 200 C |
| **Ionizer Design** | closed ion source, cylindrical symmetry, electron impact |
| **Ionizer Material** | gold plated SS304 |
| **Filament** | tungsten or ThO2/Ir with firmware protection, field replaceable |
| **Electron Energy** | 25 to 105 eV, programmable |
| **Ion Energy** | 4 or 8 eV, programmable |
| **Focus Voltage** | 0 to 150 V, programmable |
| **Electron Emission Current** | 0 to 1 mA, programmable |
| **CIS Mode Emission Typical** | 0.05 mA |
| **RGA Mode Emission Typical** | 0.5 mA |
| **CIS Mode Sensitivity** | 1e-6 A/Torr (N2 at 28 amu, Faraday) |
| **RGA Mode Sensitivity** | 1e-5 A/Torr (N2 at 28 amu, Faraday) |

| PARAMETER | VALUE |
| --- | --- |
| **CIS Linear Range Upper Limit** | 2e-3 Torr |
| **RGA Linear Range Upper Limit** | 1e-4 Torr |
| **CIS MDPP Faraday** | 1e-8 Torr |
| **RGA MDPP Faraday** | 1e-9 Torr |
| **Maximum Operating Pressure Faraday** | 1e-2 Torr to UHV |
| **Maximum Operating Pressure CDEM** | 2e-3 Torr to UHV |
| **Probe Mounting Flange** | 2.75 inch CF |
| **ECU Dimensions** | 4.1 in x 3.1 in x 9.1 in (WHD) |
| **Warm Up Peak Height** | +/-2 % after 3 minutes |
| **Warm Up Mass Stability** | +/-0.1 amu after 30 minutes |
| **Computer Interface** | RS-232C, 28800 baud with high-level command set |
| **Power Requirement** | 24 VDC at 2.5 A, male DB9; optional built-in AC module |
| **Weight** | 6 lbs (product page); manual also lists 7 lbs |
| **Detection Limit Family** | 1 ppm class / 1e-12 Torr class (CIS series headlines) Notes Specs from SRS CIS catalog, CIS product page, and CIS100/200/300 manual. CIS300 is the 300 amu closed-ion-source analyzer, notaQMS300 atmospheric sampling cart. Confirm filament type, CDEM option, and ECU power module. |
| **Operating temperature** | 70 C |

## General Specifications & Supplementary Characteristics

| PARAMETER | VALUE |
|---|---|
| **Operating temperature** | 70 C |
| **Operating Temperature** | 70 C |
| **Bakeout Temperature** | 300 C without ECU (manual also lists 350 C FC / 300 C CDEM max bake) |
| **Recommended Bakeout Temperature** | 200 C |
| **Ionizer Design** | closed ion source, cylindrical symmetry, electron impact |
| **Ionizer Material** | gold plated SS304 |
| **Filament** | tungsten or ThO2/Ir with firmware protection, field replaceable |
| **Electron Energy** | 25 to 105 eV, programmable |
| **Ion Energy** | 4 or 8 eV, programmable |
| **Focus Voltage** | 0 to 150 V, programmable |
| **Electron Emission Current** | 0 to 1 mA, programmable |
| **CIS Mode Emission Typical** | 0.05 mA |
| **RGA Mode Emission Typical** | 0.5 mA |
| **CIS Mode Sensitivity** | 1e-6 A/Torr (N2 at 28 amu, Faraday) |
| **RGA Mode Sensitivity** | 1e-5 A/Torr (N2 at 28 amu, Faraday) |
| **CIS Linear Range Upper Limit** | 2e-3 Torr |
| **RGA Linear Range Upper Limit** | 1e-4 Torr |
| **CIS MDPP Faraday** | 1e-8 Torr |
| **RGA MDPP Faraday** | 1e-9 Torr |
| **Maximum Operating Pressure Faraday** | 1e-2 Torr to UHV |
| **Maximum Operating Pressure CDEM** | 2e-3 Torr to UHV |
| **Probe Mounting Flange** | 2.75 inch CF |
| **ECU Dimensions** | 4.1 in x 3.1 in x 9.1 in (WHD) |
| **Warm Up Peak Height** | +/-2 % after 3 minutes |
| **Warm Up Mass Stability** | +/-0.1 amu after 30 minutes |

| PARAMETER | VALUE |
| --- | --- |
| **Computer Interface** | RS-232C, 28800 baud with high-level command set |
| **Power Requirement** | 24 VDC at 2.5 A, male DB9; optional built-in AC module |
| **Weight** | 6 lbs (product page); manual also lists 7 lbs |
| **Detection Limit Family** | 1 ppm class / 1e-12 Torr class (CIS series headlines) Notes Specs from SRS CIS catalog, CIS product page, and CIS100/200/300 manual. CIS300 is the 300 amu closed-ion-source analyzer, notaQMS300 atmospheric sampling cart. Confirm filament type, CDEM option, and ECU power module. |

# 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.

Specifications

## Specifications

| PARAMETER | VALUE |
|---|---|
| **Model** | CIS300 |
| **Manufacturer** | Stanford Research Systems |
| **Instrument Type** | Closed Ion Source Quadrupole Gas Analyzer |
| **Series** | CIS100/CIS200/CIS300 |
| **Alias** | CIS300; CIS300/1; SRS CIS300 |
| **Mass Range** | 1 to 300 amu |
| **Ion Source Type** | high conductance closed ion source |
| **Mass Filter Type** | quadrupole, cylindrical rods 0.25 in diameter, 4.5 in length |
| **Detector Type** | Faraday cup standard; electron multiplier (CDEM) optional/included on CIS-with-multiplier configurations |
| **Resolution** | better than 0.5 amu at 10 % peak height; adjustable to constant peak width |
| **Maximum Operating Temperature** | 70 C |
| **Bakeout Temperature** | 300 C without ECU (manual also lists 350 C FC / 300 C CDEM max bake) |
| **Recommended Bakeout Temperature** | 200 C |
| **Ionizer Design** | closed ion source, cylindrical symmetry, electron impact |
| **Ionizer Material** | gold plated SS304 |
| **Filament** | tungsten or ThO2/Ir with firmware protection, field replaceable |
| **Electron Energy** | 25 to 105 eV, programmable |
| **Ion Energy** | 4 or 8 eV, programmable |
| **Focus Voltage** | 0 to 150 V, programmable |
| **Electron Emission Current** | 0 to 1 mA, programmable |
| **CIS Mode Emission Typical** | 0.05 mA |
| **RGA Mode Emission Typical** | 0.5 mA |
| **CIS Mode Sensitivity** | 1e-6 A/Torr (N2 at 28 amu, Faraday) |
| **RGA Mode Sensitivity** | 1e-5 A/Torr (N2 at 28 amu, Faraday) |
| **CIS Linear Range Upper Limit** | 2e-3 Torr |

| PARAMETER | VALUE |
| --- | --- |
| **RGA Linear Range Upper Limit** | 1e-4 Torr |
| **CIS MDPP Faraday** | 1e-8 Torr |
| **RGA MDPP Faraday** | 1e-9 Torr |
| **Maximum Operating Pressure Faraday** | 1e-2 Torr to UHV |
| **Maximum Operating Pressure CDEM** | 2e-3 Torr to UHV |
| **Probe Mounting Flange** | 2.75 inch CF |
| **ECU Dimensions** | 4.1 in x 3.1 in x 9.1 in (WHD) |
| **Warm Up Peak Height** | +/-2 % after 3 minutes |
| **Warm Up Mass Stability** | +/-0.1 amu after 30 minutes |
| **Computer Interface** | RS-232C, 28800 baud with high-level command set |
| **Power Requirement** | 24 VDC at 2.5 A, male DB9; optional built-in AC module |
| **Weight** | 6 lbs (product page); manual also lists 7 lbs |
| **Detection Limit Family** | 1 ppm class / 1e-12 Torr class (CIS series headlines) |

Notes
Specs from SRS CIS catalog, CIS product page, and CIS100/200/300 manual. CIS300 is the 300 amu closed-ion-source analyzer, notaQMS300 atmospheric sampling cart. Confirm filament type, CDEM option, and ECU power module.

## 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

**Aumictech**
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

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