The automated CCS2100-G6 is a cold-cranking simulator for measuring apparent viscosity of engine oils from –40 °C to –5 °C. Automated sample loading, operation and solvent-free cleaning permit unattended processing of up to 14 samples at one time.

Common Applications

- Engine oils
- Lubricating oils
- Base stocks

CCS™2100-G6
Automated Cold-Cranking Simulator

For Apparent Viscosity of Engine Oils from –40 °C to –5 °C
ASTM D5293, SAE J300

Product Features & Benefits

Meets all ASTM D5293 and SAE J300 requirements and precision specifications

- Temperature range: –40 °C to –5 °C (±0.02 °C)
- Viscosity range: 900 mPa·s (cP) to 25,000 mPa·s (cP)

Unmatched Automation with Integrated Design

- Smaller footprint with no external chiller, waste pump, or computer, optimizing lab space.
- Fully Automated Operation: Load and test up to 14 samples with unattended operation for superior repeatability and reproducibility.
- Solvent-Free Cleaning: Automatically purges previous samples using a portion of the next sample during a thermoelectric warming cycle, eliminating the need for external solvents.

Updated Efficiency and Control

- Optional 4-Oil Enhanced Calibration significantly reduces time with no effect on data accuracy.
- Users now have the ability to verify temperature accuracy and calibrate their own instrument.
- Fully automated speed calibration eliminates the need for user trial and error tuning.

Reliable, convenient performance

- Standalone Touchscreen Interface: An intuitive touchscreen enables seamless configuration, testing, and on-board diagnostics, with options for data management, including saving or exporting results and other relevant information via flash drive or ethernet cable.
- FlowHub® software allows for data transfer between one computer and multiple instruments:
  - Export: data to LIMS, generate calibration certificates, set up carousels, standard oils management, automatic instrument settings backup, among many other features.
  - Import: data, calibration data from the instrument, among many other features.

CANNON INSTRUMENT COMPANY®
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CCS2100-G6 Automated Cold-Cranking Simulator

Ordering Information

CCS2100-G6 Automated Cold-Cranking Simulator consists of a thermoelectrically-cooled rotor/stator with vacuum system and injection pump, a 14 position sample carousel, a temperature verification kit, an integrated chiller, proprietary software and a set of Cannon CL viscosity standards.

Description	Part #
85 - 265 VAC, 50/60 Hz	9728-E60

Accessories & Consumables

Description	Part #
Cannon CL viscosity standards: for instrument calibration and certified dynamic viscosity data (in cP or mPa•s) from –5°C to –40°C	Various
2 oz bottles, 48 count	75.3110.1
Spare parts kit (for one year)	76.0354
Dry gas purge	76.0190

Product Specifications

Dimensions (W x D x H)	Unit: 30.5 cm x 76.2 cm x 61 cm (12 in x 30 in x 24 in)
Weight	Unit: 44.5 kg (98 lb)
Shipping dimensions (W x D x H)	Box 1: 53.4 cm x 94 cm x 109.2 cm (21 in x 37 in x 43 in) Box 2 (callibration oils): 66 cm x 51 cm x 26 cm (26 in x 20 in x 10 in)
Shipping weight	Box 1: 113.4 kg (250 lb) Box 2 (callibration oils): 23 kg (50 lb)
Maximum throughput	Up to 6 samples per hour
Automated sample capacity	14
Viscosity range	900 mPa·s (cP) to 25,000 mPa·s (cP)
Temperature range & accuracy	–40 °C to –5 °C ±0.02 °C
Minimum sample volume	55 mL
Operating conditions	15 °C to 30 °C, 10% to 75% relative humidity (non-condensing), Installation Category II; Pollution Degree 2
Electrical specifications	85 to 265 VAC, 50/60 Hz; 600 watts power consumption
Compliance	CE Mark; EMC directive (2014/30/EV); Low voltage directive (2014/35/EC); HI-POT (1900 VDC, 60 sec.); ROHS

**CCS is a trademark of Cannon Instrument Company.*

CANNON Instrument Company® provides a variety of physical property testing equipment and consumables (vials, bath fluids, and reference materials) for your testing needs. To learn more, contact sales@cannoninstrument.com.

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