CANNON® miniAV-LT is a fully automated, single sample, benchtop viscometer for low temperature (sub-zero) viscosity testing. The viscometer tube covers a viscosity range from 1-10 mm²/s (cSt) at −20 °C.

Common Applications

Jet fuel

miniAV®-LT Single-Bath Sub-Zero Kinematic Viscometer

For Sub-Zero Kinematic Viscosity of Transparent and Opaque Liquids ASTM D445/D446, ASTM D1655, DEF STAN 91:91, IP71, ISO 3104/3105

D445 precision in a compact, robust design

- Temperature testing at −20 °C
- Viscosity range: 1–10 mm²/s (cSt)
- Fits in roughly the same bench-top area as an analytical balance
- Peltier cooling is eco-friendly and requires no pressurized coolants (an air-water heat exchanger is included)
- A trusted CANNON viscometer platform offers reliability and dependable support

Fully automated bench-top testing and reduced consumable costs

- Affordable alternative to labor-intensive manual KV testing
- VISCPRO® PC software enables one computer to manage and control up to four instruments
- Automated vial washing & drying reduces vial consumption and replaces manual
- ASTM D446/ISO 3105 Ubbelohde-style tube reduces solvent usage and disposal costs by 50%

Simplified maintenance & test versatility

- Modular bath for easy maintenance access
- Operators physically replace tubes in minutes, eliminating the need for service
- Single-point temperature calibration avoids tube recalibration costs and maximizes test flexibility
- Standard dual solvent input





- √ VISCPRO Software
- √ Viscometer Tube
- ✓ Standards
- ✓ Digital Thermometer



miniAV°-LT Single-Bath Sub-Zero Kinematic Viscometer

Ordering Information

CANNON® miniAV-LT Single Bath Sub-Zero Kinematic Viscometer consists of the viscometer unit, air-water heat exchanger, external power supply, waste receiver assembly, one viscometer tube, one set of viscosity standards, a case of glass vials, a high precision digital thermometer with probe, and VISCPRO® data storage/management software. Computer sold separately.

Description	Part #
100 VAC, 50/60 Hz	9725-A96
115 VAC, 50/60 Hz	9725-A94
230 VAC, 50/60 Hz	9725-A95

Accessories & Consumables

Description	Part #
Viscosity reference standards	various
Replacement silicone bath fluid, 5 cSt, 1 L	9726-L41
20 mL vials (glass); case of 40	81.3023
Spare parts kit (1 year supply)	81.2910

Product Specifications

Dimensions (W x D x H)	Unit: 25.4 cm x 30.5 cm x 53.4 cm (10 in x 12 in x 21 in) Power Supply: 34.3 cm x 39.6 cm x 17.2 cm (13.5 in x 15.6 in x 6.8 in) Waste Receiver: 33.0 cm x 39.6 cm x 17.2 cm (13.0 in x 15.6 in x 6.8 in) Air/Water Heat Exchanger: 38.6 cm x 51.1 cm x 34.9 cm (15.2 in x 20.1 in x 13.7 in)
Weight	Unit: 27 kg (45 lb) Power Supply: 11 kg (24 lb) Waste Receiver: 6 kg (13 lb) Air/Water Heat Exchanger: 14 kg (30 lb)
Shipping dimensions (W x D x H)	Box 1: 73.7 cm x 63.5 cm x 94.0 cm; (29 in x 25 in x 37 in) Box 2: 76.2 cm x 58.4 cm x 83.8 cm; (30 in x 23 in x 33 in) Box 3: 15.2 cm x 15.2 cm x 28.0 cm; (6 in x 6 in x 11 in)
Total shipping weight	98.9 kg (218 lb)
Max. throughput	1 test per hour
Automated sample capacity	1
Viscosity range	1–10 mm²/s (cSt)
Timing resolution	0.01 s (timing accuracy to \pm 0.001 s)
Temperature range & accuracy	-20 °C ± 0.02 °C
Minimum sample/ solvent volume	5 mL sample/15 mL solvent per test
Operating conditions	15 °C to 30 °C, 10% to 75% relative humidity (non- condensing), Installation Category II; Pollution Degree 2
Electrical specifications	100 VAC, 50/60 Hz; 115 VAC, 50/60 Hz; 230 VAC, 50/60 Hz; 1,000 watt power consumption
Compliance	CE Mark; EMC directive (2004/108/EC); Low voltage directive (2006/95/EC); HI-POT (1900 VDC, 60 sec.); ROHS
Data output	RS-232 and RS-485

†Installation outside the domestic U.S. may incur additional charges.

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.

