

The HTHS Series II is a multicell capillary viscometer for simple viscosity testing of engine oils at high temperature and high shear. It meets all requirements and precision specifications of ASTM D5481 and SAE J300.

#### Common Applications

- Engine lubricants
- Used oils
- Research of oils at high temperature and high shear

# HTHS Series II High-Temperature, High-Shear Viscometer

For High Temperature, High Shear Viscosity of Engine Oils  
ASTM D5481, SAE J300

## Product Features & Benefits

Meets all ASTM D5481 and SAE J300 requirements and precision specifications

- Temperature range: 30 °C to 150 °C ( $\pm 0.1$  °C)
- Viscosity range: 2 mPa·s (cP) to 7 mPa·s (cP)\*
- Test pressure: variable from 75 psi to 500 psi
- Variable test temperature and shear rate supports research applications

## User-friendly, high speed testing

- Simple, one-button operation
- Multi-cell design permits sequential testing of up to 5 different samples
- Tests up to 20 samples per hour at  $1.4 \times 10^6 \text{s}^{-1}$  at 150 °C
- Instrument digitally displays flow time, temperature and pressure
- Standalone viscosity calculation software analyzes data and displays results
- Sample flush cycle eliminates need for hazardous cleaning solvents

## Robust, reliable performance

- Proven CANNON® reliability and outstanding support
- Reduced operator role enhances repeatability and reproducibility

\*Viscosity range is extendable to 20 mPa·s (cP) with custom configuration



# HTHS Series II High-Temp, High-Shear Viscometer

## Ordering Information

HTHS Series II High-Temp, High-Shear Viscometer consists of the viscometer unit with 5 capillaries, a set of oil viscosity standards, a high precision digital thermometer with probe and data analysis software. Optional computer for data analysis sold separately.

Description	Part #
100 VAC, 50/60 Hz	9728-C30
115 VAC, 50/60 Hz	9728-C35
230 VAC, 50/60 Hz	9728-C40

## Accessories & Consumables

Description	Part #
High temp viscosity standard, HT22, 1.5 mPa·s (cP) at 150°C	9727-U45
High temp viscosity standard, HT39, 2.0 mPa·s (cP) at 150°C	9727-U50
High temp viscosity standard, HT75, 2.7 mPa·s (cP) at 150°C	9727-U55
High temp viscosity standard, HT150, 3.7 mPa·s (cP) at 150°C	9727-U60
High temp viscosity standard, HT240, 5.0 mPa·s (cP) at 150°C	9727-U65
High temp viscosity standard, HT390, 7.0 mPa·s (cP) at 150°C	9727-U70
High temp viscosity standard, HTNN-1, Non-Newtonian, 3.6 mPa·s (cP) at 150°C & 10 <sup>6</sup> sec <sup>-1</sup>	9727-U92
High temp viscosity standard, HTNN-2, Non-Newtonian, 3.1 mPa·s (cP) at 150°C & 10 <sup>6</sup> sec <sup>-1</sup>	9727-U94

## Product Specifications

Dimensions (W x D x H)	52.1 cm x 38.7 cm x 68.6 cm (20.5 in x 15.25 in x 27 in)
Weight	40.5 kg (89 lb)
Shipping dimensions (W x D x H)	81.3 cm x 71.1 cm x 106.7 cm (32 in x 28 in x 42 in)
Shipping weight (with all items)	77.1 kg (170 lb)
Maximum throughput	Up to 20 samples per hour
Automated sample capacity	5
Viscosity range	2 mPa·s (cP) to 7 mPa·s (cP)* *Extendable to 20 mPa·s (cP) with custom configuration
Timing resolution	0.01 s
Temperature range & accuracy	30 °C to 150 °C ± 0.1 °C
Minimum sample volume	10 mL sample
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. 500 watts power consumption.
Compliance	CE Mark; EMC directive (2004/108/EC); Low voltage directive (2006/95/EC); HI-POT (1900 VDC, 60 sec.); ROHS

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](mailto:sales@cannoninstrument.com).



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