

# ISAAC

## App based glass capillary viscometer system



PSL Rheotek is proud to introduce **ISAAC**, a flexible viscometer system powered by a powerful menu driven App.

**ISAAC** has several measurement modes including Kinematic Viscosity and Solution Viscosity. The easy to use App can control one or two viscometer positions.

**ISAAC** can be used with any combination of viscometer baths and chillers.

### Features

- **ISAAC** has one software App – two viscometer positions
- **ISAAC** is easy to use with Bluetooth connectivity
- **ISAAC** automates flow time measurements
- **ISAAC** includes flexible flow time modes
- **ISAAC** calculates kinematic viscosity results
- **ISAAC** includes wireless printing of results
- **ISAAC** includes a comprehensive results database

### Operation

**ISAAC** is easy to set up and operate. The small foot-print means that Isaac can be easily accommodated on top of or adjacent to a viscometer bath.

Opening the **ISAAC** App will take the user straight to the measurement screen via a simple log in procedure.

Sample details are entered into the sample testing configuration screen. The test mode is selected along with any other parameters e.g. type of sample for ASTM D445 determinability precision.

When ready, the user presses the "Start Test" button and the measurement process will commence automatically. This includes drawing the sample up the capillary, holding and releasing for each flow time measurement. All measurement data is recorded as well as the calculation of determined viscosity results and final viscosity results.

## Technology

**ISAAC's** technology is based upon the latest embedded electronics, Bluetooth communication and App based software.

Meniscus detection is carried out using nIR optical detectors.

## System Configurations

**ISAAC** is configured with the following modules:

- Control Module
- Tablet
- 1 or 2 measuring heads
- Suitable sizes of Ubbelohde viscometer
- Viscometer bath (optional)
- Thermoelectric chiller (optional)

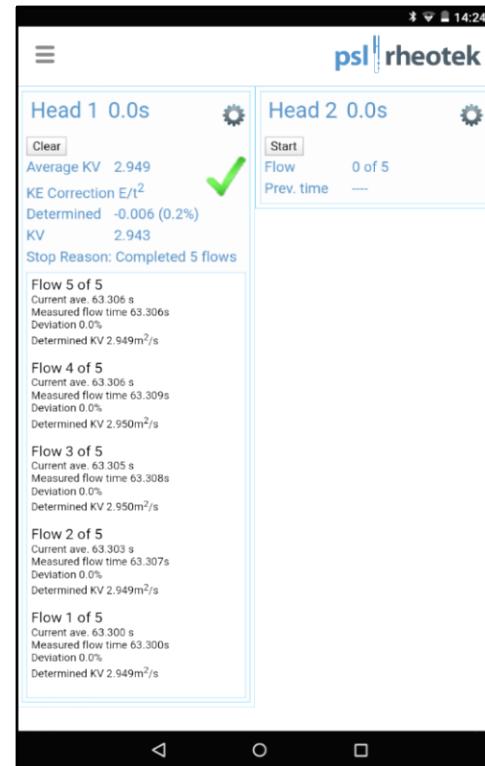
**PSL Rheotek** are the trade names of Poulten Selfe and Lee, a UK company established in 1850.

The Company has a long tradition of developing and manufacturing scientific measuring instruments – primarily for viscosity, temperature and density.

The Company is embracing new technology and has a strong development team in the areas of heat transfer, embedded electronics and robotics.

The PSL Calibration Laboratory is accredited in viscometer and temperature calibration.

Going forwards, the company is further developing a fully APP based viscometer system.



ISAAC Specifications	
Control Module:	
No. of viscometer positions	1 or 2
No. of bath positions	1 or 2
Interfaces	RS232 and RS485
Measuring Head:	
Detection system	nIR
Glass capillary type:	AKV (ASTM) Ubbelohde
Viscosity measuring range:	1 to 10,000 mm <sup>2</sup> /s
Tablet:	
Operating System	Android
Power requirement	100 – 240 VAC

Ordering information	
EVS-ICM-100	ISAAC – one position semi auto system
EVS-ICM-110	ISAAC – two position semi-auto system
Optional:	AKV (ASTM) Ubbelohde viscometers, viscometer bath and chiller