

# ramé-hart Model 590

**ramé-hart Advanced Automated Goniometer / Tensiometer  
with Automated Tilt, Dispensing and DROPimage Advanced**

## ramé-hart Model 590 (p/n 590-U1)

Model 590 represents the most advanced and automated tool available for measuring static and dynamic contact angle, advancing and receding contact angle, surface energy, and surface and interfacial tension. Model 590 accepts every available modular accessory and includes our award-winning DROPimage Advanced software for complete methods-based interfacial analysis. The system ships complete with the fully software-controlled Automated Tilting Base Assembly (p/n 100-25-A) as well as the Automated Dispensing System (p/n 100-22).

**What's in the box:** Advanced Goniometer with high-speed U1 Series SuperSpeed Camera, Automated Tilting Base, Automated Dispensing System, Microsyringe Fixture and Shade, Illuminator and Fiber Optic Bundle, (1) Microsyringe Assembly, (1) 22g Straight Needle, PC and LCD, DROPimage Advanced Software, User Manual, Calibration Tool, and Storage Cover — everything needed to get started taking measurements.

\*\*Please refer to product literature for the Automated Tilting Base and Automated Dispensing System for product speci

## Specifications\*\*

<b>Stage Size</b>	2 x 3 in (51 x 76mm)
<b>Sample Size</b>	up to 12 in (300mm) x unlimited*
<b>Contact Angle Range</b>	0 to 180°
<b>Resolution</b>	0.01°
<b>Accuracy</b>	+/- 0.10°
<b>U1 Series Camera</b>	SuperSpeed USB 3.0, 1/3" CCD, 100fps, Progressive Scan, Sony Sensor, 659 x 494 pixels
<b>Backlighting</b>	Variable Fiber Optic Illuminator
<b>Stage</b>	Precision 3-Axis
<b>Dimensions</b>	19 x 20 x 10 in (480x500x250mm)
<b>Weight</b>	55 lbs / 25 kg (less power and PC)
<b>Power Supply</b>	110 or 220 VAC
<b>DROPimage Features</b>	Contact Angle Measurement (7) Surface Energy Tools Methods-based, Surface and Interfacial Tension, Advancing and Receding Contact Angles Spares Kit 100-SPARES-F

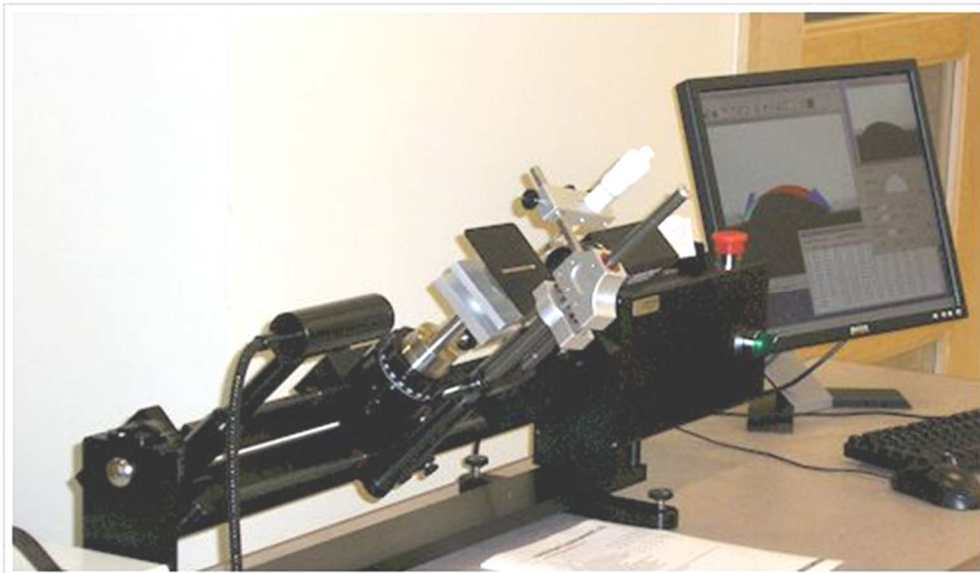
## Options

Environmental Chamber	100-07
Advanced Chamber	100-26-TH
Oscillator	100-28
Overhead Imaging Kit	100-31
Elevated Temp Syringe	100-11
Wafer Support	100-21-x
Peltier Chamber	100-30
Environmental Fixture	100-07-60
Film Clamps	100-15

Contact us for a complete list of available options.

**Custom options available.**

\*requires custom optics and substrate support options for larger samples.



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