

Force Tensiometer



Manufacturer: Bionline Scientifics

Model: Sigma 700

Applications: Measurement of Surface Tension, Interfacial Tension, Adhesion Force, and Density of liquid samples. All the experiments are temperature controlled (-20 °C to 200 °C).

Sample Volume Required: Minimum 50ml

Technical Specifications:

Sigma 700 (Extended range microbalance)	
Maximum load	210 g
Weighing resolution*	0.01 mg
Force resolution	0.1 mN
ST Measuring range	1-2000 mN/m
ST Resolution with standard probe**	0.001 mN/m

Taring	Automatic computer-controlled taring
Calibration and locking	Automatic
<p>* Actual resolution of balance.</p> <p>** Resolution in mN/m or dynes/cm depends on accuracy of balance and length measurement of the Du Nouy ring or Wilhelmy plate. Resolutions given above are theoretical limits for standard Attension probes made according to the requirements of DIN and ASTM standards. In actual practice reproducibility of surface and probe will limit the reproducibility of data to about 0.01 mN/m.</p>	
Lifting System	
Stage Speed	0.01 - 500 mm/min
Stage position resolution	0.016 μ m
Maximum stroke	70 mm
Computer interface	
Connection	USB (RS232 as option)
Voltage and current	
Input voltage	100 – 240 Vac
Frequency	50 – 60 Hz
Input current (Sigma 700)	100 – 220 mA
Fuses	T1.0A 5x20 mm
Environmental conditions	
Ambient temperature	15 – 30 °C
Ambient pressure	700 to 1060 hPa
Ambient humidity	20 – 80% (non-condensing)