

TENSIOMETER

Smart measurement instrument with an automatic dropper for surface energy research.



COST-EFFECTIVE

Our instrument drastically reduces the initial investment costs associated with tensiometers while maintaining high end features.



EASY TO USE

The app at the heart of the Dropometer is simple and intuitive to use, bypassing any need for paid user-training courses. With our Dropometer you can be up and running in less than twenty minutes.



SMARTPHONE-BASED

The system doesn't require the use of additional laptops or desktop computers and benefits from the full connectivity of a smartphone.



MEASUREMENT

Static and dynamic contact angle
Static and dynamic surface tension
Sliding angle
Surface energy

METHODS

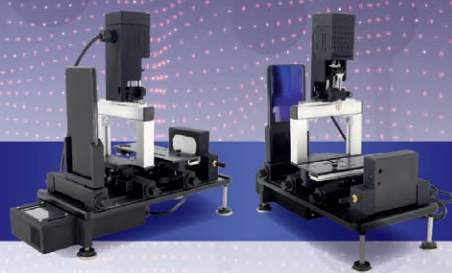
Young-Laplace and Polynomial
Young-Laplace
Polynomial
Equation of States, Fowkes, Oss and Good

www.princetonscientific.com

Tel. (609) 9243011 info@princetonscientific.com
Fax (609) 9243018 P.O. Box 148 · Easton, PA 18044

@Princeton_Sci company/princeton-scientific-corp/ @PrincetonScientific





TENSIOMETER

Products specifications	Sessile	Energy	Tilted	Pendant
MEASUREMENT				
Range	10° to 175°	Up to 100 mN/m	10° to 175°	Up to 75 mN/m
Resolution	0.01°	0.01 mN/m	0.01°	0.01 mN/m
Accuracy	0.35°	0.03 mN/m	0.35°	0.03 mN/m
Model	Young-Laplace and polynomial	Equation of states, Fowkes and, Oss and Good	Polynomial	Young-Laplace
Drop type	Sessile advancing, receding and static	Sessile static	Tilting sessile	Pendant static and dynamic
TILTING PLATE AND DOSING				
Control	Manual and Automatic			
Range	0° to 60°			
Dosing system	Manual & Automatic			
Minimum Drop Volume with Automatic Dosing	0.05 μ L			
Drop Volume with Manual Dropper	1 rotation is 5.29 μ L			
SOFTWARE				
Application	Android and iOS based software			
Security	Multiple user account per device			
Data sharing	Email and cloud (Google drive, Dropbox, MS One drive and Box)			
Interfaces	Bluetooth, wifi, usb, cellular			
CAMERA				
Performace	10 fps			
Zoom	Zoom			
Focus	4x			
Focus	Manual			
Sensor	Trigger control based on camera level			
ILLUMINATION				
Type	High power LED			
Size	68 by 51 mm			
ENVIRONMENT				
Temperature	10° to 45°			
Humidity	Without condensation			
INSTRUMENT DIMENSION				
Footprint	30(H) x 15(W) x 45(L) cm			
Weight	1 kg			
POWER				
Voltage	5 V battery only operation*			
Battery time	Up to 8 h			

www.princetonscientific.com

Tel. (609) 9243011 info@princetonscientific.com
 Fax (609) 9243018 P.O. Box 148 · Easton, PA 18044

