

#### Title:

**Optical Tensiometer** 

### Sub-title:

Biolin Attension Theta Flex is a versatile contact angle meter that enables reliable measurements to characterize surface properties.

## General description:

The system captures images of liquid drops and automatically analyzes their shape, which is influenced by the liquid's surface tension, gravity, and density. The captured images are analyzed using a drop profile fitting method to accurately determine the contact angle and surface tension.

### Features:

- High-resolution videocamera with x6.5 magnification and fine focus.
- Allows precise control of liquid drop size for repeatable measurements.
- Automated drop deposition and video analysis
- Provided of tilting cradle for dynamic contact angle measurement.

# **Applications:**

- Contact angle measurement to assess surface wettability.
- Calculation of surface free energy
- Calculation surface tension using the pendant drop method.
- · Calculation of interfacial tension.
- Measurement of roll off and sliding angles
- Determines the hydrophobicity or hydrophilicity of surfaces.











