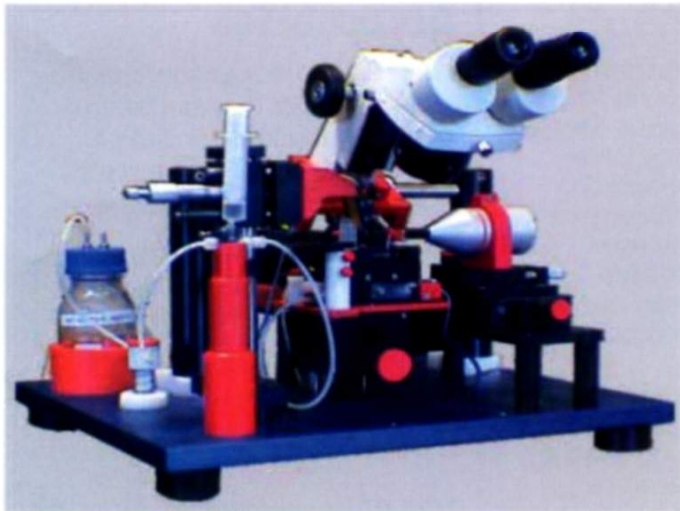




SI-H MKB Muscle Research System

Mechanical and optical measurements of intact and skinned muscle fibers



One instrument now virtually spans the entire muscle physiology field. Combining the versatility of the KG force transducers and a solid platform for mechanical studies and optical measurement, the Standard Muscle Research System can be equipped with photometers, a linear motor, a laser diode, perfusion cuvettes and temperature controls for running advanced muscle studies.

With the Standard Muscle Research System, at least five key experimental areas of muscle research can be examined.

- By measuring the myomechanical properties of contracting and relaxing muscle strips, scientists can measure intact muscle responses to electrical stimulation or tetanus in skeletal muscles

- Measure twitch amplitude and kinetics analysis, time to peak, 50% relaxation velocities, starting curve and diastolic force development
- Perform after loaded contractions in heart muscle
- Perform eccentric contractions in skeletal muscle
- Add a linear motor with control units to measure mechanical muscle properties like slack-test, isotonic release, constant velocity release, stretch release, vibration studies and after-loaded contractions
- Add a laser diode for simultaneous measurement of the sarcomere length of intact muscles and skinned muscle fibers
- Add a gradient maker for automated force-pCA and calcium studies in skinned muscle fibers

Features

- Data Recording and Analysis included
- Modular design for flexibility when upgrading
- Two cuvette tables (one with a single cuvette and the other with 10 Teflon troughs)
- Constructed with corrosion-free materials (Stainless steel, anodized aluminium, plastic)
- Lifetime warranty on optical force transducer