General-purpose Hand Dynamometer

The TSD121C is an isometric dynamometer that measures a variety of gripping or pulling strengths for multiple muscle groups. The isometric design improves experiment repeatability and accuracy. Hand grip strength is easily recorded in pounds or kilograms force. Using the Dynagrips option, the pulling strength of single or multiple muscle groups can be measured. To measure arm, leg, torso or neck strength, mount the TSD121C against a wall or floor and pull the free end directly (or redirect with a pulley). For in-depth studies of muscular activity, combine TSD121C force recordings with EMG recordings. The TSD121C has a 3-meter cable terminated in a connector that interfaces with the DA100C general-purpose transducer amplifier. The ergonomic soft handle design and simple calibration procedure make this device very easy to use.

Specifications

- Isometric Range: 0-100 kg
- Nominal Output: 13.2 µV/kg (normalized to 1V excitation)
- Weight: 315 g
- Dimensions (L x W x T): 185 x 42 x 30 mm
- Cable Length: 3 m
- Interface: DA100C—see page I106
- TEL100C Compatibility: SS25—see page I119

Catalog No. $ Model Product
BS4 72-7327 TSD121C Hand Dynamometer
BS4 72-7330 DYNAGRIPS Dynagrips Option

Oxygen Saturation (SpO₂) Transducers

The TSD123 series transducers connect to the OXY100C pulse oximeter module to provide continuous readings for SpO₂, pulse rate and pulse waveform. The TSD123A transducer is a comfortable and easy to use finger clip, ideal for short-term monitoring. The TSD123B transducer attaches to fingers, toes and ears with adhesive patches (included) and is well suited for long-term monitoring.

Specifications

- Optical Transmission: Red (660 nm) and IR (940 nm)
- MRI Compatible: Yes (no ferrous parts)
- Weight: TSD123A: 23 g, TSD123B: 6 g
- Dimensions (L x W x H): TSD123A: 62 x 23 x 26 mm, TSD123B: 12 x 12 x 12 mm
- Sterilizable: Yes (contact Biopac for details)
- Cable Length: 1 m
- Interface: OXY100C—see page I113

Catalog No. $ Model Product
BS4 72-3721 TSD123A Finger Clip
BS4 72-3722 TSD123B Universal Adhesive

Stroboscope

The TSD122 stroboscope connects directly to the UIM100C or STM100C module for single pass or averaging type visual evoked response applications. The stroboscope can be set up to either generate or respond to a TTL synchronizing signal for data acquisition. The TSD122 is battery-operated and will operate from zero to 12,000 flashes a minute. Cables are included for interfacing with the MP System.

Specifications

- Display: Digital LCD
- Battery: Built-in, rechargeable
- Battery Life: 60 hours at 100 strobes/sec
- Flash Duration: 30 µsec
- Flash Energy: 180 mJoule
- External TTL: Sync/Trigger
- Weight: 1.1 kg
- Body Dimensions: 9.3 x 9 x 23 cm
- Reflector Housing: 12.2 cm (dia)
- Handle: 10.8 cm (long)
- I/O Ports: TTL (Sync input and output) - 3.5mm phone jacks
- Cables: CBL102 and CBL106
- Interface: UIM100C—see page I104
- STM100C—see page I116

Catalog No. $ Model Product
BS4 72-7328 TSD122A Stroboscope, 120/60Hz
BS4 72-7329 TSD122B Stroboscope, 240/50Hz