

MLT004/ST Grip Force Transducer

Smart Transducer Series

Description

The Grip Force Transducer is a pre-calibrated strain-gauge based isometric dynamometer with a linear response in the 0–800 N range. It is only suitable for direct connection to a PowerLab Pod port or Pod Expander port.



Software Compatibility

- LabChart for Windows v7.1.1 or later
- LabChart for Mac v7.1 or later
- LabTutor/LabAuthor for Windows v3.0.4 and v4.0.3 or later

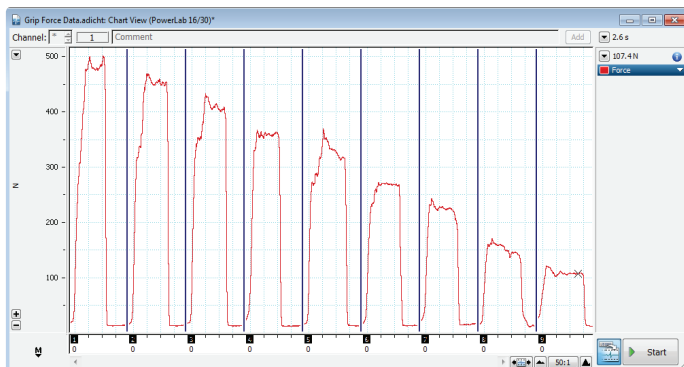
Operation

To use the Grip Force Transducer, plug the cable from the unit into a Pod port on the front of the PowerLab or into a Pod Expander port. Smart transducers are supplied ready to use and do not require initial calibration or excitation-setting resistors. When force is applied to the metal bars an output calibrated in units of Newtons can be recorded in LabChart or LabTutor. The data file below shows part of a typical muscle fatigue measurement using the Grip Force Transducer powered from a PowerLab. A green LED on the connector housing indicates the transducer is receiving power and is ready for use.

Application

Used to measure hand grip force as an indicator of muscle fatigue. Sophisticated muscle activity studies can be made by simultaneously recording hand grip force with an EMG signal from various muscle groups.

Typical Data



Muscle fatigue data shown over time

WARRANTY: ADInstruments PowerLab data acquisition units (Product Number Prefix: PL), Front-end Signal Conditioners (Product Number Prefix: FE) are warranted against defects in materials and workmanship for a period of 5 years from the date of purchase. Other PowerLab data acquisition units and ADInstruments manufactured Front-end and Pod Signal Conditioners, and Instruments are warranted of a period of 3 years from the date of purchase. Third party products are covered by the manufacturer's warranty. Warranties are void if the product has been damaged due to negligence. Consumables and electrodes are not covered by a warranty. All questions regarding service and warranty should be directed to your nearest ADInstruments representative or one of the offices listed below.

Caution

Read "Statement of Intended Use" on our website or in "Getting Started with PowerLab" before use.

Specifications

Linear range:	0 – 800 N
Max. safe force:	1000 N
Power:	+ 5 V (via Pod port)
Accuracy:	± 5% of reading
Cable length:	2.8 m (9.2')
Weight:	380 g (with cable)
Connections:	PowerLab Pod port or Pod Expander port only

All specifications were tested at the time of printing and are subject to change.

Ordering Information

MLT004/ST Grip Force Transducer

For use with:
PowerLab with a Pod port or ML305 Pod Expander

ADINSTRUMENTS.com

ISO 9001:2008 Certified Quality Management System

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