



The M5-2-COF coefficient of friction (COF) gauge is an integral part of a COF testing system, typically including a motorized test stand and COF fixture. With a capacity of 2 lbf [10 N], the gauge can be used to measure friction for a wide range of materials, ideal for conformance to ASTM D1894 and other relevant standards. Static and kinetic coefficients are displayed on the backlit LCD, and are calculated from a user-programmable sled weight.

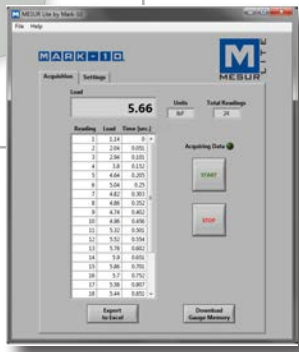
Data can be transferred to a PC or data collectors via USB, RS-232, Mitutoyo (Digimatic), or analog outputs. On-board memory for up to 1,000 readings is included, as are statistical calculations with output to a PC. Integrated set points with indicators and outputs are ideal for pass-fail testing and for triggering external devices such as an alarm, relay, or test stand. Configurable password protects against unauthorized changes to settings.

The M5-2-COF may also be used for a number of common tension and compression testing applications. The gauge is based on Mark-10's Series 5 advanced digital force gauges, and includes the series' full set of functions and settings.

The M5-2-COF includes MESUR™ Lite data acquisition software. MESUR™ Lite tabulates continuous or single point data. Data saved in the gauge's memory can also be downloaded in bulk. One-click export to Excel easily allows for further data manipulation.



Shown with an ESM303 test stand and G1086 COF fixture



MESUR™ Lite data acquisition software is included with the M5-2-COF

## Features

- Calculates static and kinetic coefficients of friction
- Configurable sled weight (100 - 1000 g)
- USB, RS-232, Mitutoyo, and analog outputs
- 1,000-point data memory with statistics and outputs
- Programmable set points, with indicators and outputs
- Live load bar graph with set point markers
- Configurable audio alarms and key tones
- Password protection, configurable for individual keys and calibration

### Display Indicators

- Set points
- Pass/fail indicators
- Battery indicator
- Number of saved data points
- Tension / Compression Indicator
- Compression peak reading
- Static COF (tension peak reading)
- Kinetic COF (when in Averaging mode)
- Measurement mode
- Units of measurement
- Analog load bar w/set point markers

## Configurable Sled Weight



The COF is calculated based on the sled weight, adjustable from 100 to 1,000 g, to conform to various standards. A password can be set to protect settings from unauthorized changes.

## Specifications

<b>Capacity x Resolution:</b>	5 x 0.001 COF*, 2 x 0.0005 lbf, 32 x 0.01 ozF, 1 x 0.0002 kgF, 1000 x 0.2 gF, 10 x 0.002 N
<b>Accuracy:</b>	±0.1% of full scale
<b>Sampling Rate:</b>	7,000 Hz
<b>Power:</b>	AC or rechargeable battery. Multi-step low battery indicator is displayed, gauge shuts off automatically when power is too low.
<b>Battery life:</b>	<b>Backlight on / off:</b> up to 7 / 24 hours of continuous use
<b>Outputs:</b>	<b>USB / RS-232:</b> Configurable up to 115,200 baud. Includes Gauge Control Language 2 for full computer control. <b>Mitutoyo (Digimatic):</b> Serial BCD suitable for all Mitutoyo SPC-compatible devices. <b>Analog:</b> ±1 VDC, ±0.25% of full scale at capacity, <b>General purpose:</b> Three open drain outputs, one input. <b>Set points:</b> Three open drain lines.
<b>Safe overload:</b>	150% of full scale (display shows "OVER" at 110% and above)
<b>Weight:</b>	1.0 lb [0.45 kg]
<b>Included items:</b>	Carrying case with chisel, cone, V-groove, hook, flat, extension rod, universal voltage AC adapter, battery, quick-start guide, USB cable, resource CD (USB driver, MESUR™ Lite software, MESUR™ gauge DEMO software, and user's guide), and NIST-traceable certificate of calibration with data.
<b>Environmental requirements:</b>	40 - 100°F, max. 96% humidity, non-condensating
<b>Warranty:</b>	3 years (see individual statement for further details)

\* Depends on the sled weight. For a 200 g weight, the COF capacity is 5. COF resolution is fixed at 0.001.

Specify model M5-2-COFE for euro plug (220V), M5-2-COFU for UK plug (220V) or M5-2-COFA for Australian plug (220V).

## Dimensions in [mm]

