

The 5i advanced digital force / torque indicator is designed to work with a wide range of remote force and torque sensors. With exclusive Plug & Test™ technology, all calibration and configuration data are saved within the sensor's smart connector, not the indicator, allowing for true interchangeability. In addition, all sensors are fully compatible with the more basic 3i force / torque indicator. The sampling rate is blazing fast 7,000 Hz, producing accurate results even for quick-action tests. Data can be transferred to a PC or data collectors via USB, RS-232, Mitutoyo (Digimatic), or analog outputs.

On-board data 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. An analog load bar is shown on the display for graphical representation of applied force or torque. The 5i's averaging mode addresses the need to record the average load over time, while external trigger mode makes switch activation testing simple and accurate. The 5i includes MESUR™ Lite data acquisition software. MESUR™ Lite tabulates continuous or single point data. Data saved in the indicator's memory can also be downloaded in bulk. One-click export to Excel easily allows for further data manipulation.



## FEATURES

- Interchangeable force and torque sensors through Plug & test™ technology
- Sensor password protection to prevent unauthorized sensor use
- High-speed 7,000 Hz sampling rate
- USB, RS-232, MITUTOYO, and analog OUTPUTS
- 1,000-Point data memory with STATISTICS AND OUTPUTS
- Live load bar graph with set point markers
- Programmable set points, with Indicators and OUTPUTS
- Peak readings and set points always displayed
- Averaging mode – calculates average readings over time
- External trigger mode – for switch contact testing or remotely stopping display update
- Configurable audio alarms and key TONES
- Password protection of individual keys and calibration



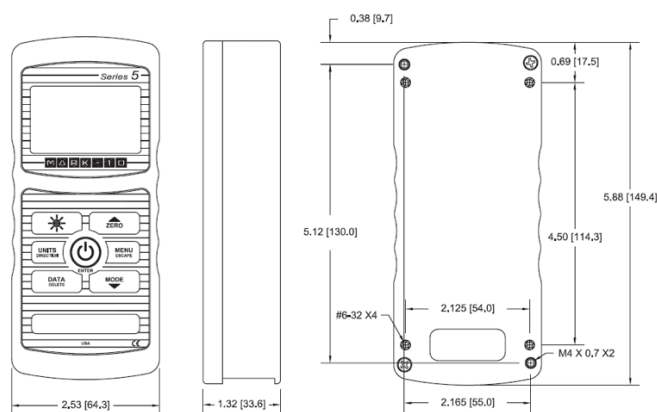
## Plug & Test Technology

The plug & test connector locks into the receptacle in the indicator when fully inserted. Dual buttons on the indicator housing release the connector for easy removal. Gold plated spring contacts ensure long lasting and reliable connection.

## APPLICATIONS

- Automotive industry
- Manufacturing
- Assembly
- Quality control

## DIMENSIONS



## SPECIFICATIONS

| Model                 | 5i                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accuracy              | $\pm 0.1\%$ of full scale + sensor                                                                                                                                                                                                                                                                                                                              |
| Sampling Rate         | 7000 Hz, pulse response of 1/3500 sec. minimum                                                                                                                                                                                                                                                                                                                  |
| Power                 | AC or rechargeable battery. Multi-step low battery indicator is displayed gauge shuts off automatically when power is too low                                                                                                                                                                                                                                   |
| Battery Life          | Backlight on/off: up to 7/24 hours of continuous use                                                                                                                                                                                                                                                                                                            |
| Outputs               | USB/RS-232 Configurable up to 115,200 baud. Includes Gauge Control Language 2 for full computer control.<br>Mitutoyo (Digimatic): Serial BCD suitable for all Mitutoyo SPC- compatible devices.<br>Analog: $\pm 1$ VCD, $\pm 0.25\%$ of full scale at capacity.<br>General purpose: Three open drain outputs, one input.<br>Set points: Three open drain lines. |
| Configurable settings | Digital filters, outputs, automatic output (via USB/RS232), automatic shut off, default settings, averaging modes, external trigger, passwords, key tones, audio alarms, back light, calibration                                                                                                                                                                |
| Weight                | 0.7lb (0.33 kg)                                                                                                                                                                                                                                                                                                                                                 |
| Included Item         | Carrying case, 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 certificate of conformance                                                                                                                                                  |
| Warranty              | 3 years (see individual statement for further details)                                                                                                                                                                                                                                                                                                          |

## PART NUMBER

| Model  | Description                                            |
|--------|--------------------------------------------------------|
| M5I    | Advanced Force/Torque Indicator, 110V                  |
| M5IE   | Advanced Force/Torque Indicator, 220V, European Plug   |
| M5IU   | Advanced Force/Torque Indicator, 220V, UK Plug         |
| M5IA   | Advanced Force/Torque Indicator, 220V, Australian Plug |
| AC1008 | Tabletop mounting kit for 3i/5i                        |

9.11.23



**Group Four**  
A PARASOL COMPANY

"WE TAKE THE LOAD OFF YOUR MIND"

Group Four Transducers  
22 Deer Park Drive  
E. Longmeadow, MA 01028  
www.groupfourtransducers.com

Phone: (800) 419-1444  
Fax: (413) 525-6182  
sales@group-4.com