

Model 501 Data Collector With Torque Option

The rugged yet lightweight ASI DataMyte 501 is the ideal solution for torque audits, especially when a portable device is required. The 501 is designed to collect data from a wide variety of torque wrenches, torque transducers and rundown tools.

Easy-to-use with intuitive, menu-driven commands, the 501 features a large LCD visual interface, and an ergonomic design with keys oriented for both right- and left-hand operation. The contoured grip reduces operator fatigue and possible motion injuries.

Torque Applications

- Residual torque on a previously installed fastener can be measured with Peak, Breakaway or Restart strategies using a hand wrench, with or without a crow's foot extension.
- Real-time installation torque from DC/electric, air stall or impulse tools can be captured with Peak or Pulse strategies.
 Angle of rotation or pulse count between Snug and Peak may be captured concurrently with appropriate transducer.
- Torque tool cutoff and angle encoder accuracy can be verified off-line.
- Hand assembly and rework operations can be performed where a fastener is to be driven to a given torque or is to be driven to a given angle past a given torque.



The DataMyte 501 provides a handheld solution for torque audit applications.

Key Points:

- Rugged and portable
- Ideal for confined spaces
- Torque curve plot
- Eight-hour battery life
- Visual and audible indicators
- Data can be exported to Excel spreadsheets
- Residual torque measurement
- Dynamic torque measurement

Support Software

ASI DataMyte offers two support software options for the 501. Each is used to create data collection part setups and to upload collected data. They are:

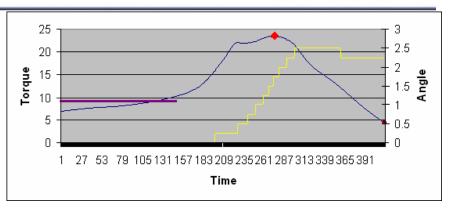
- The ASI DataMyte Setup Editor with RCSL which can also be used to transfer collected data directly into an ASI DataMyte Quantum database for further analysis and reporting.
- ASI DataMyte TranSend software which uploads collected data to ASI DataMyte Applied Stats and Analyst software, to standard spreadsheet programs such as Microsoft Excel, or as tab- or comma-delimited ASCII data files.





Torque Curve Plot

The 501 data collector's LCD panel can display the torque vs. time curve for the joint being measured. The selected algorithm captures the desired point or the unique "pick-a-point" feature lets you choose any point from the torque curve as the data value. The raw torque, time and angle components of the curve as well as all relevant configuration parameters may be exported to and plotted in Microsoft® Excel.® An example Excel plot is shown at right.



Additional Features

A standard red/green/yellow dual LED display provides visual indication of in or out of spec conditions and caution alerts for operators. An internal buzzer, or an optional lapel buzzer, provide audible feedback. The 501 data collector resists damage from oil, water-based cutting fluids, abrasives, dust, metal chips and filings. Standard power comes from two rechargeable AA batteries or from an AC adaptor.

Specifications

Hardware

- Weight: 15.4 oz. (431.2 gm)
- Dimensions: 4.08 x 10.5 x 1.77 in. (10.3 x 26.6 x 4.5 cm)
- Construction: Case: ABS plastic. Keypad: Silicone rubber
- Power Supply: 2 AA 1.5V rechargeable batteries with external AC charger/adaptor; 8-hour battery life
- Display: 128x128 dot matrix LCD panel; backlit panel option
- Audible output: buzzer with volume and tone control
- Standard connectors: 1 serial, 1 remote buzzer output, 1 DC power in, 1 digital gage, 1 thumb/footswitch; torque module or analog module are optional
- Numerical precision: 8 digits
- Torque module accuracy: Voltage signal: 2.0mV/V, Dynamic: +/-0.20%, Static: +/-0.10%*
- Filter: 5-pole low pass, user programmable between 100Hz and 10kHz
- Sample rate: Up to 20kHz
- Data acquisition rate: Up to seven peak readings for separate characterisitics per second (for testing "cam over" torque screwdrivers; see rate plot at right)
- Operating temperature range: 32-115°F, (0-45°C) 10-90% non-condensing humidity
- Keypad: Simple or alphanumeric
- Wrist strap and belt clip

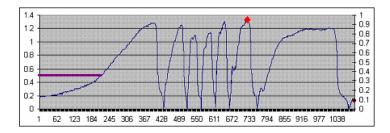
Other Features

- Red/green/yellow dual LED alert
- Flash memory for upgrades
- Six languages: English, French, German, Italian, Portuguese, Spanish plus user-defined terminology
- Password protection
- Optional VIN check digit validation

Compatibility

- ASI DataMyte Data Setup Editor software, all versions
- ASI DataMyte TranSend software, all versions
- RCSL (Remote Client Serial Link), all versions

Specifications are subject to change without notice.







^{*}Calibrated using a 350-Ohm bridge in a clockwise direction.