

# || Measuring Quality

## **TNP Digital Torque Meter**

The Series TNP Digital Torque Meter is a precision instrument for measuring OPEN and CLOSE torque values for various applications. The TNP Torque Meter is used in medical, pharmaceutical, industrial quality control, R&D and countless other torque applications.

As a cap torque analyzer, the TNP repeatedly determines bottle closure and breakaway torque. Its wide memory capacity is capable of storing 1,000 data points, including Average, Maximum and Minimum values. A HI-GO-LO LED comparator feature can be utilized for large batch testing to ensure overall product quality. The TNP is a portable device powered with internal rechargeable batteries or through provided universal AC adapter/charger.

Designed with a small footprint, it can easily be transferred between the shop floor and laboratory taking up little space when operating. The TNP Torque Meter comes standard with USB connection and cable for easy PC/Software interface. Combined with the free "Digitorq" Software, statistical testing, graphing and analysis can be performed.



#### **Features**

- Precise ± 0.5% F.S. accuracy ensures exact results
- Variety of applications met with ranges from 4.4 in·lb (50 N·cm) all the way to 88.5 in·lb (10 N·m)
- Quick & Easy set up with removable chuck pins that adjust test diameter size
- Memory function allows convenient storage of up to 1000 readings for later retrieval
- One touch operation enables quick reset for subsequent tests
- Large, easy to read LCD displays torque values in four selectable engineering units
- PC connectivity with USB interface and free Digitorq software enables data analysis and graphing on Microsoft® Excel
- Truly portable with compact, light-weight design and internal, rechargeable batteries
- Recharge batteries with included 120/240V AC adapter/charger or utilize adapter for continuous use
- Selectable measuring modes enables capture of Average, Peak Opening or Peak Closing values in either clock-wise (CW) or counter clock-wise (CCW) directions
- Speed up large batch tests with the integral Red/Green LED comparator that responds in accordance to pre-programmed tolerances
- Durable, cast-aluminum heavy-duty construction withstands demanding wear and tear
- Includes Factory Certificate, CE Approval and 2 Year Warranty!

TNP for Bottle Cap Removal







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### **TNP Series Specifications**

Measuring Range	<b>TNP-0.5:</b> 0-50.00 Ncm, 0-500.0 mNm, 0-5099 gcm, 0-4.425 lbin
	<b>TNP-2:</b> 0-2.000 Nm, 0-200.0 Ncm, 0-20.39 kgcm, 0-17.70 lbin
	<b>TNP-5:</b> 0-5.00 Nm, 0-500.0 Ncm, 0-50.99 kgcm, 0-44.25 lbin
	<b>TNP-10:</b> 0-10.00 Nm, 0-1000 Ncm, 0-102.0 kgcm, 0-88.5 lbin
Test Sample Diameter Range	0.39" - 7.48" (10 - 190 mm)
Accuracy	±0.5% / F.S.
Display	Main display: 4-digit LCD display, Character height 0.5" (12 mm)
Comparator Display	HI - GO - LO (green and red LED indicator)
Display Update Time	Select from 0.125 second (8 times/second), 0.25 second (4 times/second), 0.5 second (2 times/second), 1 second (1 time/second). Peak display: 0.125 second
Measuring Mode	Opening Mode: Show max value when opening (peak display) Displays max counterclockwise torque
	Closing Mode: Show max value when closing (peak display) Displays max clockwise torque
	Average Mode: Real time display (average value display) Displays torque in real time
Overload	150% of full scale
Sampling Rate	1000 Hz
Memory	1000 data (max)
Data Output	USB1.1
PC Software	Digitorq software (free, download from web site: www.shimpoinst.com)
Power	Built in nickel hydride battery (NiMH) or Auto-ranging AC adapter (AC100 - 240V)
Battery Information	NiMH: 8 hours use after full charge. 16 hour max. recharge time.
Operating Environment	32 - 104°F (0 - 40°C)
Dimensions	12.60" x 8.94" x 4.96" (320 x 227x 126 mm)
Product Weight	TNP-0.5, -2, -5 = Approx. 17.6 lb (8 kg); TNP-10 = 27.5 lb (12.5 kg)
Package Weight	TNP-0.5, -2, -5 = Approx. 19 lb (8.6 kg); TNP-10 = 30.7 lb (13.9 kg)
Software	DigiTorque TNP Free Download from www.shimpoinst.com
Included Accessories	USB cable, 120/240 VAC AC adapter, 30mm chuck pin (4pcs)
Certifications	CE
Warranty	2-Year

### **Ordering Details**

TNP-0.5	Range of 0-4.425 in·lb (5099 g·cm, 500.0 mN·m, 50.00 N-cm)
TNP-2	Range of 0-17.70 in·lb (20.39 kg·cm, 200.0 N·cm, 2.000 N-m)
TNP-5	Range of 0-44.25 in·lb (50.99 kg·cm, 500.0 N·cm, 5.000 N-m)
TNP-10	Range of 0-88.5 in·lb (102.0 kg·cm, 1000 N·cm, 10.00 N-m)
NIST-TORQUE	NIST traceable certificate of calibration with data

#### **Accessories**

TNP-TP30	Set of four 30 mm long (1.18") replacement torque pins
TNP-TP50	Set of four 50 mm long (1.97") torque pins
FG-09V120UC	Universal charger adapter for 120/240 VAC

#### **TNP Series Dimensions**







