

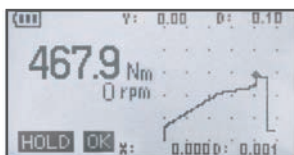
TM400

PORTABLE TORQUE MONITOR FOR UTM II /UTMV

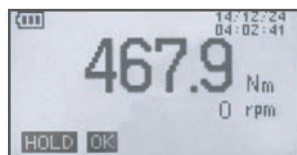


Suitable torque meter UTM II UTMV

- Convenient portable monitor for easy use of UTM II /UTMV.
- Ideal for on-site calibration of nut runners (use with UTM II with the square drive option).
- With the built-in battery, it can be operated even without power source.
- Easy connection to UTM II /UTMV with the supplied cable.
- Operation power can be supplied to the UTM II /UTMV. (also to an optional rotary encoder*)
- High-speed sampling at 20000 times/sec.!!
- Torque & rotation speed and torque-angle curve can be monitored.
- Data recording with memory function and USB.
- Various display mode: real-time, graph, recorded data, etc...
- Upper/lower limit & hold function.
- Change the display mode by pressing the ESC button.



Graph display



Value display

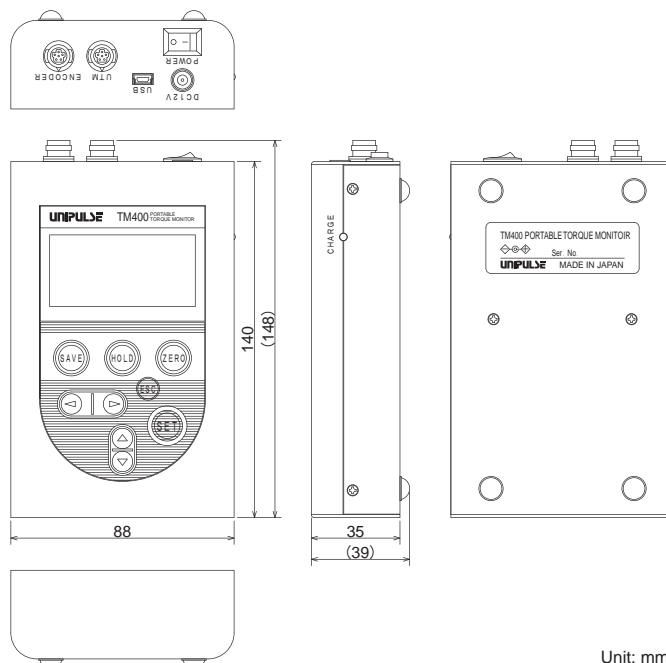
* Rotary encoder option is not available for UTMV.
It will be a waveform display of torque fluctuations in chronological order.

Specifications

Torque input	- Voltage input
	Signal input range -5 to +5 V Input impedance: 1 M or more
	Accuracy Non-linearity: Within 0.02% FS±1 digit Zero drift: Within 0.2 mV/°C RTI Gain drift: Within 0.01%/°C
	Analog filter Low pass filter (-6 dB/oct.) Select from 10, 30, 100, 300, 1 k, 3 k, 10 k, 30 k Hz
	A/D converter Rate: 20000 times/sec. Resolution: 24 bit (binary) Effective Resolution: Approx. 1/30000 against 5 V
Rotation input	- Pulse input (open-collector)
	Maximum input frequency: In accordance with the output frequency of the UTM II /UTMV series
	Minimum input frequency: 15 rpm
	Minimum detection pulse width: 50 μs
	Circuit configuration No-voltage contact input (minus common) Open collector connectable (Ic = Approx. 10 mA)
Encoder input	- Pulse input (open-collector)
	Maximum input frequency: 50 kHz
Display	Display unit 128 x 64 dots monochrome LCD (display area: 57 x 28 mm)
	Displayed data Torque, rotation speed, angle (numeric), torque-time or torque-angle/displacement curve (graphic), and status display (HI, LO, OK, and HOLD)
Interface	USB
Power supply	Built-in secondary battery
	Continuous use time: Approx. 5 hours (at room temperature) AC adaptor
Operating conditions	Operation temperature: -10 to +40°C
	Storage temperature: -20 to +60°C
	Humidity: 85% RH or below (non-condensing)
Dimension	88(W) x 140(H) x 35(D) mm (excluding projections)
Weight	Approx. 500 g
Attachment	AC adaptor:.....1
	Operation manual:.....1
	Cable for connecting UTM II /UTMV 2 m:.....1
	Cable for connecting UTM II rotary encoder 2 m:.....1
Accessories	CA81-USB: miniUSB-computer USB cable 1.8 m
	CATM21-M: Cable for connecting UTM II /UTMV 2 m
	CATM51-M: Cable for connecting UTM II /UTMV 5 m
	CATM(R)21: Cable for UTM II with rotary encoder connection (non-connector at one end) 2 m
	CATM(R)21-M: Cable for connecting UTM II rotary encoder 2 m
	CATM(R)51-M: Cable for connecting UTM II rotary encoder 5 m
	CN90: Waterproof plastic connector for UTM II /UTMV
	CN91: Waterproof plastic connector for UTM II rotary encoder
	TM400 AC CABLE EU: AC cable (for EU)
CE marking certification	EMC directives EN61326-1
	Safety standard EN62311
	Please specify requirement for CE marking certified product when making your order.

* Please note that there are possibilities of individual differences in a color tone on display devices such as LEDs, fluorescent display tubes and LCDs due to manufacturing process or production lots.

External dimension



Unit: mm