TM201

USB INTERFACE DEVICE FOR UTM Ⅱ/UTMV



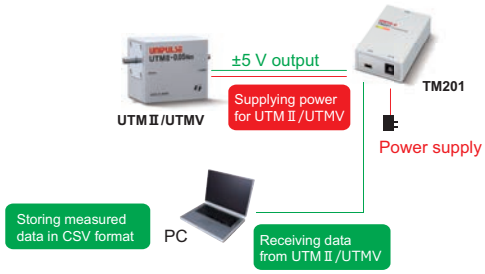
RoHS2

Suitable torque meter UTM Ⅱ UTMV

- Variations of torque, rotation speed, and power* can be monitored and saved on PC. (Application software can be downloaded from our website for free)
- Maximum, minimum, and average value can be displayed.
- Measurement (numeric) data are automatically saved in CSV format.
- The unit supplies electric power to UTM Ⅱ/UTMV.
- Two cables are attached: one for UTM Ⅱ/UTMV and the other for PC.

* Power (W) = 2π × Torque (N m) × Rotation speed (rpm) / 60

■ Application example

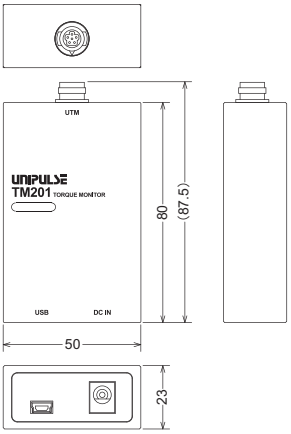


Specifications

UTM Ⅱ/UTMV Interface	- Torque sensor input (voltage input)	
	Signal input range	−5 to +5 V Input impedance: 1 MΩ or more
	Accuracy	Non-linearity: Within 0.02% FS±1 digit Zero drift: Within 0.2 mV/℃ RTI Gain drift: Within 0.01%/℃
	Analog filter	Primary low-pass filter 1 kHz (fixed)
	Digital filter	Secondary low-pass filter fc = 3, 30, 300 Hz, OFF (depending on settings)
	Data output rate	Speed: 300 times/sec. Resolution: 24 bit (binary) Effective resolution: Approx. 1/30000 against 5 V
	- Pulse input for rpm (input for open collector type)	
	Maximum input rotation speed	Conforming to the maximum rotation speed of UTM Ⅱ/UTMV
	Minimum input rotation speed	Selectable from 15, 10, 5, 3, or 2 rpm (when pulse rate is 4 ppr)
	Minimum pulse width	50 μs
	Circuit layout	No-voltage (dry) contact input (minus common) open collector outputs can be connected (Ic = Approx. 10 mA)
	- Power supply for UTM Ⅱ/UTMV	
	Power supply	DC 24 V (UTM Ⅱ/UTMV 1 unit)
Display	LED status light	LED (Red): power supply/alarm status LED (Green): UTM Ⅱ/UTMV is operating normally
Interface	USB	
General performance	Power supply	AC 100 to 240 V (+10%−15%) (Free power source 50/60 Hz) * When supplied AC adapter is used
	Power consumption	4 W typ. (AC adapter)
	Operating conditions	Operation temperature: 0 to +40℃ Storage temperature: −10 to +60℃ Humidity: 80% RH or less (non-condensing)
	Dimension	50(W) × 80(H) × 23(D) mm (Not including projections)
	Weight	Approx. 120 g
Attachments	Setup guide · 1 AC adapter for TM201 1.8 m · · · · · · 1	Cable for connecting UTM Ⅱ/UTMV 2 m · · · · · · 1 USB cable (TypeA-Bmini) 1.8 m · · · · · · · · · · · · 1
Optional accessories	CA81-USB: CATM21-M: CATM51-M: CN90: TM201 AC PIN EU:	USB cable (TypeA-Bmini) 1.8 m (Same as the attachment) Cable for connecting UTM Ⅱ/UTMV 2 m (Same as the attachment) Cable for connecting UTM Ⅱ/UTMV 5 m Waterproof plastic connector for UTM Ⅱ/UTMV Switching AC PIN (EU)

External dimension

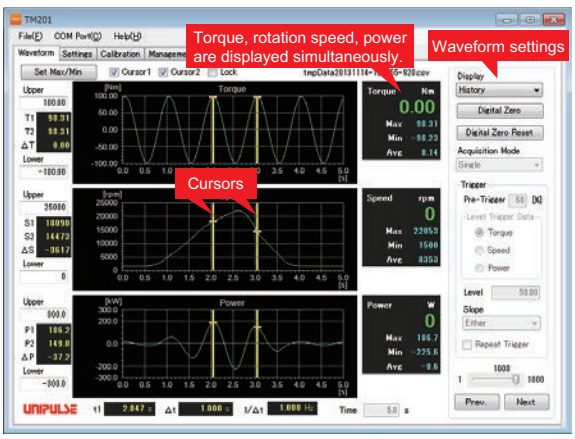
Unit: mm



Application software for USB interfaces

- Supporting USB interface option for TM201, TM400, TM700, TM301, TM320, TM380, and TC80.
- Enabling real-time display of torque measured by UTM Ⅲ/UTM Ⅱ/UTMV, parameter settings, calibration, and data recording in CSV format. (UTM Ⅲ can only use TM320, TM380 & TC80)

Software for USB interfaces for TM201



* PC software can be downloaded from UNIPULSE website.

■ Waveform settings

Change settings of waveform display and/or data

(1) Display mode

Normal: Waveforms currently acquired are displayed

History: Waveforms previously saved are displayed

(2) Acquisition mode

Single: Once "Start" button is clicked, waveform data is acquired for pre-set time period.

Repeat: "Single" mode operation will repeat in cycle until "stop" button is clicked.

Hold trigger (Only with TM301, TM320 and TM700): Data is acquired when "Hold" button is clicked.

Level trigger*: Pre-trigger (0 to 99), trigger data (torque, rotation speed, power),
Level (±99999), Trigger slope (positive, negative, either),
Repeat trigger (Standby & wait for another trigger after waveform acquisition)

* Depending on the torque monitors, the function varies. See Help of each software.

■ Cursor

Move two cursors freely, display each data value and their difference

■ Zoom-in display (TM201, TM301, TM320, TM380, TM400 & TC80)

Zoom-in display at any area