

TM201

USB INTERFACE DEVICE FOR UTM II /UTMV

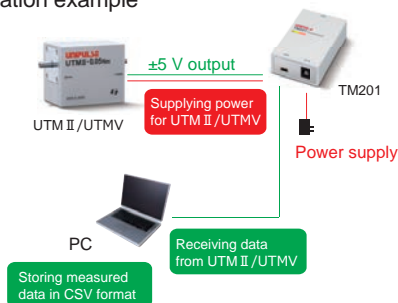


Suitable torque meter UTM II UTMV

- 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) = $2\pi \times \text{Torque (Nm)} \times \text{Rotation speed (rpm)} / 60$

■ Application example

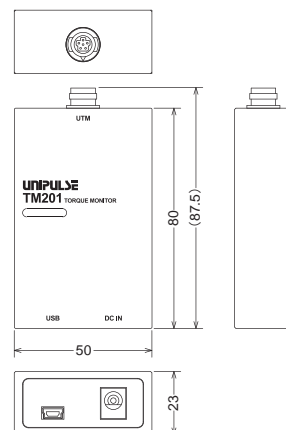


Specifications

UTM II/UTMV Interface	- Torque sensor input (voltage input)	
	Signal input range	-5 to +5 V input impedance: 1 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	Primary low-pass filter 1 kHz (fixed)
	Digital filter	Secondary low-pass filter $f_c = 3, 30, 300$ Hz, OFF (depending on settings)
	Data output rate	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 frequency	Compatible with the pulse output frequency of UTM II /UTMV series
	Minimum input frequency	Select from 15, 10, 5, 3, 2 rpm (when pulse rate is 4 ppr)
	Minimum pulse width	50 μ s
	Circuit layout	No-voltage (dry) contact input (minus common) open collector outputs can be connected (I_c = 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	Temperature: Operation 0 to +40°C Storage -10 to +60°C Humidity: 80% RH or less (non-condensing)
	Dimension	50(W) × 80(H) × 23(D) mm (Projections excluded)
	Weight	Approx. 120 g
	Attachment	Setup guide.....1 AC adapter for TM201 1.8 m.....1 Cable for connecting UTM II /UTMV 2 m.....1 MiniUSB -USB cable 1.8 m.....1
	Accessories	CA81-USB: miniUSB-computer USB cable 1.8 m (same as attachment) CATM21-M: Cable for connecting UTM II /UTMV 2 m (same as attachment) CATM51-M: Cable for connecting UTM II /UTMV 5 m CN90: Waterproof plastic connector for UTM II /UTMV TM201 AC PIN EU: Switching AC PIN (EU)
CE marking certification	EMC directives	EN61326-1
	Safety standard	EN62311
Please specify requirement for CE marking certified product when making your order.		

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, TM400 & TC80)

Zoom-in display at any area