TM201

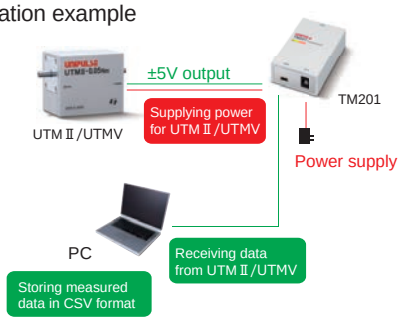
USB INTERFACE DEVICE FOR UTM Ⅱ/UTMV

CE RoHS

- Variations of torque, rpm, 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

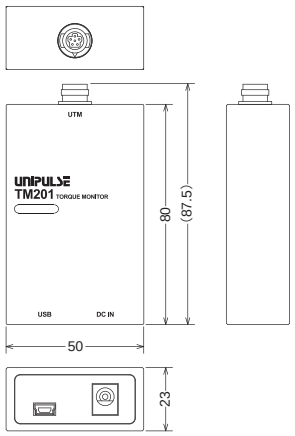


Specifications

UTM Ⅱ Interface	・Torque sensor input (voltage input) Signal input range −5 to +5V input impedance : 1MΩ or more Accuracy Non-linearity : Within 0.02%FS±1digit Zero drift : Within 0.2mV/℃ RTI Gain drift : Within 0.01%/℃ Analog filter Primary low-pass filter 1kHz (fixed) Digital filter Secondary low-pass filter fc = 3, 30, 300, OFF (variable) Data output rate 300 times/sec. Resolution : 24bit Effective Resolution: Approx. 1/30000 against 5V	
	・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, or 2 rpm (when pulse rate is 4 ppr) 60, 40, 20, 12, 8 rpm (when pulse rate is 1 ppr) Minimum pulse width: 50μs Circuit layout No-voltage (dry) contact input (minus common): open collector outputs can be connected (Ic= approx. 10mA)	
	・Power supply for UTM Ⅱ Power supply DC24V (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	AC100V to 240V (+10%−15%) (free power source 50/60Hz) *When supplied AC adapter is used
	Power consumption	4W typ (AC adapter)
	Operating conditions	Temperature : Operation 0℃ to +40℃ Storage −10℃ to +60℃ Humidity : 80%RH or less (non-condensing)
	Dimension	50(W)× 80(H)× 23(D)mm (Projections excluded)
	Weight	Approx. 120g
Attachment	Setup guide·····1 AC adapter for TM201 1.8m·····1	Cable for connecting UTM Ⅱ/UTMV 2m·····1 MiniUSB -USB cable 1.8m·····1
Accessories	CA81-USB:miniUSB-computer USB cable 1.8m CATM21-M:Cable for connecting UTM Ⅱ/UTMV 2m CATM51-M:Cable for connecting UTM Ⅱ/UTMV 5m CN90:Waterproof plastic connector for UTM Ⅱ/UTMV TM201ｵﾌﾟｼｮﾝACｱﾀﾞﾌﾟﾀ:AC adapter(JAPAN AC PIN) TM201ｵﾌﾟｼｮﾝACﾋﾟﾝ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, and TM301.
- Enabling real-time display of torque measured by UTMⅡ/UTMV, parameter settings, calibration, and data recording in CSV format.

■ Display mode

<Normal>

1. Single

After "start" button is pressed, data will be recorded once for pre-set time period.

2. Continuous

"Single" mode operation will be repeated in cycle until "stop" button is pressed.

3. Hold trigger (only with the TM301)

After "start" button is pressed, it will be put on standby for a trigger ("hold").

It will start importing data when "Hold" button is pressed.

*Pre-trigger setting range: 0 to 99%

4. Level trigger

After "start" button is pressed, it will be put on standby for a trigger (variable conditions).

It will start importing data when the input level goes above or below the pre-set limit in pre-determined direction.

<History>

Display saved graph data

■ Trigger function

Pre-trigger/trigger slope/repeating trigger