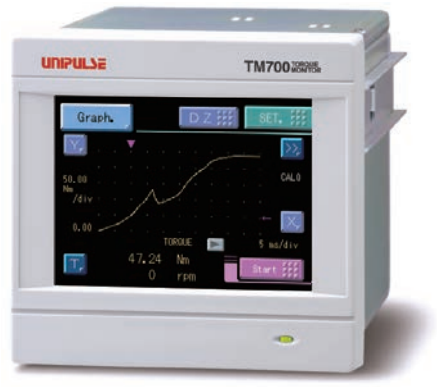
TM700

HIGH-SPEED TORQUE WAVEFORM MONITOR FOR UTMⅡ/UTMV



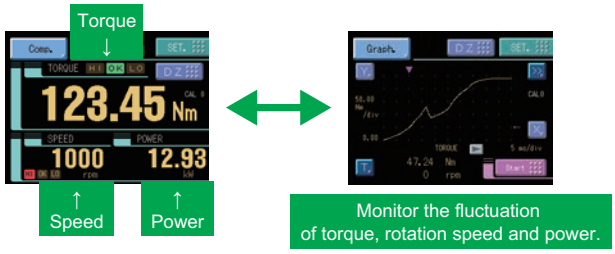
DIN 96 RoHS2

Suitable torque meter UTMⅡ UTMV

- High-speed sampling at 20000 times/sec.
- A torque curve monitor supporting the high response time of UTMⅡ/UTMV (1 kHz).
- Monitoring of torque, rotation speed and power*1 curves.
- Upper/lower limits & hold function.
- Easy connection to UTMⅡ/UTMV with the supplied cable. (Operation power can be supplied to the UTMⅡ/UTMV and to an optional rotary encoder*2)
- Data recording with USB.

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

*2 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 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	Low pass filter (-6 dB/oct.)
		Selectable from 10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz
	A/D converter	Speed: 20000 times/sec.
		Resolution: 24 bit (binary) Effective Resolution: Approx. 1/30000 against 5 V
	Voltage monitor output	
		Linked to the output voltage of the torque meter
Rotation input	- Pulse input (open-collector)	
	■ High-speed (for standard UTMⅡ/UTMV)	
	Maximum input rotation speed	Conforming to the maximum rotation speed of UTMⅡ/UTMV
	Minimum input rotation speed	Selectable from 15, 10, 5, 3, or 2 rpm (when pulse rate is 4 ppr)
	Minimum detection pulse width	50 μs
	Circuit configuration	No-voltage contact input (minus common)
		Open collector connectable (Ic = Approx. 10 mA)
	■ Low-speed (for UTMⅡ with rotary encoder option)	
	Maximum input rotation speed	Approx.1000 rpm
	Minimum input rotation speed	0.1 rpm
	Minimum detection pulse width	5 μs
	Circuit configuration	No-voltage contact input (minus common)
		Open collector connectable (Ic = Approx. 10 mA)
Display	Display unit	3.5 inch TFT color LCD
External signal	Output signal (8 points)	
	ex) high and low limit outputs	
	Input signal (10 points)	
	ex) hold control input, digital zero input (DZ)	
Interface	SIF: 2-wire serial interface	
	USB: USB interface	
	D3V: D/A converter voltage output (3 ch) (Option)	
General specifications	Power supply	DC 24 V (±15%)
	Power consumption	6 W typ.
	Operating conditions	Operation temperature: −10 to +40℃
		Storage temperature: −40 to +80℃
		Humidity: 85% RH or less (non-condensing)
	Dimension	96(W) × 96(H) × 138(D) mm (Not including projections)
	Weight	Approx. 1.0 kg
Attachments	Operation manual····· 1	External input/output connector····· 1
	Cable for connecting UTMⅡ/UTMV 2 m··· 1	Operating tool (with D/A converter (3 ch) option)··· 1
Optional accessories	DTC2:	Case for TM700 (with AC power supply)
	CA372-I/O:	Cable with FCN connector at one-end 3 m
	CA81-USB:	USB cable (TypeA-Bmini) 1.8 m
	CATM21-M:	Cable for connecting UTMⅡ/UTMV 2 m (Same as the attachment)
	CATM51-M:	Cable for connecting UTMⅡ/UTMV 5 m
	CATM(R)21-M:	Cable for connecting UTMⅡ rotary encoder 2 m
	CATM(R)51-M:	Cable for connecting UTMⅡ rotary encoder 5 m
	CN50:	FCN series I/O connector (with cover) (Same as the attachment)
	CN55:	FCN series I/O connector (with diagonal cover)
	CN73:	D/A converter (3 ch) connector
	CN90:	Waterproof plastic connector for UTMⅡ/UTMV
	CN91:	Waterproof plastic connector for UTMⅡ rotary encoder
	GMP96x96:	Rubber packing

* 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.

Structure of product code

TM700 □
① ②

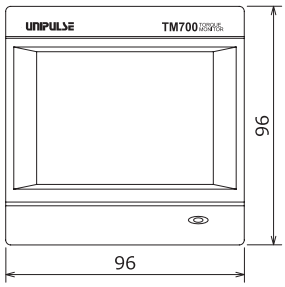
① Standard unit

② Interface

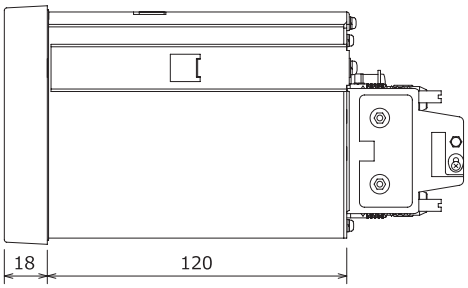
Sign	Interface
Standard	SI/F, USB
D3V	D/A converter (Voltage output) (3 ch)

External dimension

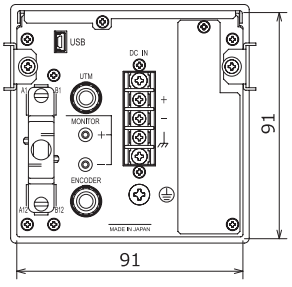
(Front)

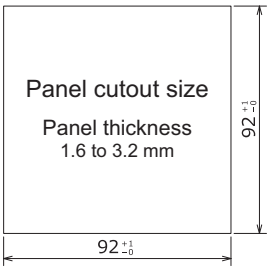


(Side)



(Rear)





Unit: mm

DTC2: Case for TM700 (with AC power supply)

