

TT3000 Ultrasonic Tension Meter



NEW

TT3000



Digital **Direct Reading**

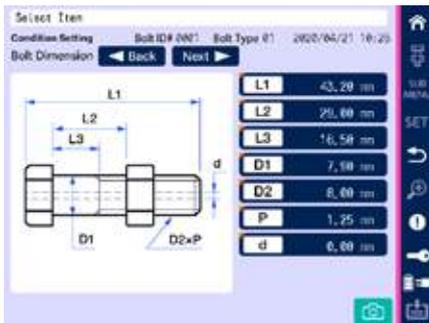
- Non-destructive axial bolt tension tester
- Updated version of TT2000 model
- Enhanced the communication function, usability by touch panel

Model	TT3000
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TT3000 Specifications

Measuring method	Ultrasonic pulse propagation time difference	
Measurement	Bolt axial tension	
Components	Main unit / Ultrasonic sensor / Thermocouple	
Applicable bolt length	5.00~25000.00 mm	
Applicable bolt diameter	More than M5 size	
Ultrasonic wave frequency	1~20 MHz	
Range of speed	500~20,000m/s	
Measuring items #1	Bolt Axial Tension / Bolt Initial Length / Elongation / Stress / Traveling Time	
Measuring items #2	Travelling Time, Length, Wave, Temperature	
Measuring resolution	Axial tension	0.1 kN / 0.01 kN
	Time	0.1 ns
	Elongation	0.0001 mm
Data updating	Measurement	0.04 sec
	Screen	0.2 sec
Capacity of data memory	2000 bolts	
Bolt temperature correction	Upto 50 different type of bolts	
	Key Input System, -100 to +500 C degree	
Detection method	Auto, Thermocouple Unit	
	Full Wave, Positive half wave, Negative half wave, RF Wave	
Display	Color TFT 7.5, 640 x 480 dots	
	Touch panel in a resistance film system	
External interface	Type K thermocouple Input - 1ch	
	USB - 1ch for serial communication	
	SD Card, SD/SDHC/SDXC, up to 64GB - 1ch	
	LAN, TCP/IP 1ch	
	VGA single monitor output - 1ch	
	Photo coupler inlet 4ch/outlet 4ch	
	Analog output 4~20mA 1ch, Max. load resistance 500Ω	
Power supply	Encoder input - 1ch	
	AC Adapter 100 - 240V, Output DC12V 60W	
Operating temperature	Built-in battery 11h usage, 4h battery charge	
	Enable to charge by AC adapter during use.	
Dimension	-10 to +60 C degree under AC adapter operation	
Weight	0 to +40 C degree under battery operation	
Body	H168 x W250 x D63.5mm	
Waterproof/dust proof	1.2 kg, w/o Battery	
Regulation	ABS	
	IP 20 when closing battery lid	
Language	CE Marking	
	Low voltage directive : 2014/35/EU	
	EMC directive 2014/30/EU	
Standard accessories	EU RoHS 2 directive 2011/65/EU	
	English / Japanese	
	Operation manual, Calibration test result, Traceability chart,	
	AC Adapter, ADT-060A12AAB-A, compliance with CE, AC power cable JP	
Standard accessories	Li-Ion battery, RRC2057, compliance with CE	
	USB cable, SD card, Power cable, sensor probe cable, sensor probe	
	Carrying handle, Aluminum case	

Note 1. Sensor probe is compatible with TT2000.



Bolt dimension input



B1 Echo confirmation



Waveform before & after giving loading



Measurement result data inquiry

TT3000 Optional Accessories

Model Name	AC Power Cable US
	AC Power Cable 220V
	Thermo Sensor
	Handle Plate
	Aluminum Case
	Sensor probe cable SCA-TT2000