

Thermometers



CE

Yokogawa Test & Measurement Corporation



Simplicity Allows for Ease of Use

(Shown above is the TX1003. The TX1002 has no CH key.)

TX10 Series of Digital Thermometers

TX10 Series offers thermocouple thermometers that support K, J, E and T type thermocouples. There are three models available: 1-channel single-function, 1-channel multi-function, and 2-channel multi-function models.

TX 1001		 1-channel TC TYPE Operation 	Select the thermocouple type (K, J, E, and T) for the initial setting. (The type K is factory-set at shipment) Press and hold down the TC TYPE key while press- ing the POWER key. The TX10 enters the thermocouple type selection mode, and each press of the TC TYPE key switches between the thermocouple types. Then accept the setting with the POWER key. (Make sure that the characters in the display have changed.) Press this key to hold the measured value.
	DATA HOLD DISITAL THERMOMATER Data power of release Data hold District thermological power Set TC TYPE	 Memory-in Fur Up to ten data ite value is displayed User calibration Calibration and additional 	ems can be stored. When recalled, the stored data d with its memory number.
TX 1002 TX 1003		CH (TX1003 only) DATA HOLD RECORD	 Thermocouple type (K, J, E, and T) select key (Operation is the same as TX1001) Input channel select key With each press, the channel switches through the sequence of "chA," "chB," and then "chA-chB." Data hold key A held measured value, can be stored in the memory of an optional memory number, which is selected with the ▲, ▼ keys. Maximum and minimum record key Stores the maximum and minimum values from the time the RECORD key is pressed. Data record key Stores the held measured value in memory. (Up to
Light Weight:	DATA HOLD DEITAL THERMOMETER DEITAL THERMOMETER DEI	READ REL/ADJ	 ten) Resolution select key With each press, resolution alternates between 0.1°C and 1°C. (Within the range of -200.0°C to 199.9°C) Maximum and minimum values, and stored data read key Every time this key is pressed, the maximum and minimum values, stored data, and the current measured data are displayed in sequence. Relative display select key Displays measured values with reference to the value obtained immediately before this key can select or release the relative display. Simplified correction mode key Sets the correction value, and selects active/inactive of the simplified correction function. ▲, ▼ Data call-up key Used to select a memory number when calling up stored data. Also used to adjust the correction value





	Digital Thermometer		
Product name	Single-function, 1 channel	Multi-function, 1 channel	Multi-function, 2 channels
Model	TX1001	TX1002	TX1003
Number of input channels		1	2
Measuring range (only the main unit)	Thermocouple typeType K: -200°C to 1Type J: -200°C to 1		: -200°C to 700°C : -200°C to 400°C
Resolution	-200.0°C to 199.9°C: 0.1°C -200.0°C to 199.9°C: 0.1°C or 1°C (when 1°C resolution is set) 200°C or above: 1°C +200°C or above: 1°C		
Accuracy (only the main unit)	$\begin{array}{ccc} -200.0^{\circ}\text{C to } -100.1^{\circ}\text{C}: & \pm(0.1\% \text{ of } \text{rdg} + 1.0^{\circ}\text{C}) & \text{*Accuracy of reference junction} \\ -100.0^{\circ}\text{C to } 199.9^{\circ}\text{C}: & \pm(0.1\% \text{ of } \text{rdg} + 0.7^{\circ}\text{C}) \\ +200^{\circ}\text{C or above, or when } 1^{\circ}\text{C resolution is set:} & \pm(0.2\% \text{ of } \text{rdg} + 1^{\circ}\text{C}) & \text{terminal is in equilibrium.} \end{array}$		$(0.1\% \text{ of } rdg + 0.7^{\circ}\text{C})$ compensation is included $\pm 0.4^{\circ}\text{C}$ when the temperature of the input
Temperature coefficient		\pm (0.015% of rdg +0.06°C)/°C	
Measurement interval	Approx. 1 sec. (1 channel measure		Approx. 1 sec. (1 channel measurement) Approx. 2 sec. (2 channel measurement)
Data storage	None	Capable of storing	g up to 10 measured data items
Simplified correction	None	Correction range	ge: ±20°C of measured value
Display items	HOLD,°C, ch A, TC type K, J, E, T, Battery alarm	HOLD, RCD, REL, ADJ, MAX, MIN, ME chA, TC type K, J, E, T Battery alarm	EM, °C HOLD, RCD, REL, ADJ, MAX, MIN, MEM, °C chA, chB, chA-chB TC type K, J, E, T Battery alarm
Other functions	Auto power-off, battery alarm		
Display	LCD		
Operating temperature and humidity	0°C to 50°C, 20 to 80% RH (no condensation)		
Power requirements	Two AA-size alkaline dry batteries (LR6)		
Battery life	About 450 hours		
Drip-proof construction	Conforms to IP54 (dust-proof and drip-proof requirements of IEC529)		
Compliance with standards	EMC standards EMI (interference signal): EN55011;1998, EN61326-1;1998+A1 (Class B, Group 1) EMS (immunity): EN50082-1;1997, EN61326;1998+A1		
External dimensions	$I = \left[\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $		
Supplied accessories	Two AA-size alkaline dry batteries (LR6) and instruction manual		
Optional accessories	Temperature probes (for K type thermocouple) Rounded end probe (90020B, 90021B, 90022B) Needle probe (90023B, 90024B) Surface probe (90030B, 90031B, 90032B, 90033B) Bead TC (90029B) Extension cable 5 m (245921) /10 m (245922)		
	Soft cas Waterpr	e (93012) oof cover (5·per package) (93011)	

Specifications of Accessories

Probes for TX10

Model	Probe type	Measuring range	Tolerance	Response time (second)	Sensor Dimenter / Length (m/m)	Cord length
90020B	rounded end	-50 to 600°C		1.4	φ3.2 / 200	1.2 m
90021B	rounded end	-50 to 600°C		0.4	φ1.6 / 150	1.2 m
90022B	rounded end	-50 to 600°C	T < 375°C: ±1.5°C 375°C < T: +0.004 × T°C	1.4	¢3.2 / 500	1.2 m
90023B	needle	-50 to 500°C	0.00011120.0017710	0.4	ø1.6 / 100	1.2 m
90024B	needle	-50 to 500°C		1	φ2.1 / 100	1.2 m
90030B	Surface straight	-20 to 250°C	(T-Ts) ≤ 100°C: ±2.5°C 100°C < (T-Ts): -0.03 × T°C to +2.5°C		15 (temp. sensing portion)	1.2 m
90031B	Surface angled	-20 to 250°C	T: -20°C to 250°C, Ts: 0°C to 40°C		\$15 (temp. sensing portion)	1.2 m
90032B	Surface straight	-20 to 500°C	(T-Ts) < 333°C: +2.5°C 333°C ≤ (T-Ts): +0.0075 × T°C	2	\$15 (temp. sensing portion)	1.2 m
90033B	Surface angled	-20 to 500°C	(T-Ts) < 167°C: -2.5°C 167°C ≤ (T-Ts): -0.015 × T°C T: -20°C to 500°C, Ts: 0°C to 40°C	2 0	15 (temp. sensing portion)	1.2 m
90029B	Bead TC	-40 to 260°C	±2.5°C		1200 (included cord)	

Optional Accessories for TX10

Product name	Model
Temperature probe (for type K)	90020/21/22/23/24/30/31/32/33
Bead TC (for type K)	245907
K-shape connector	99009
U-shape connector (for input voltage) (for TM20 only)	99008
Extension cable (5 m)	245921
Extension cable (10 m)	245922
Soft case	93012
Waterproof cover (5 per package) (for TM10, TM20, TX10)	93011

NOTE: Please purchase commercially available thermocouples (Type-E/J/T), connectors and extention cables.

(90% response) NOTE: 90030 is using polyimide to insulate from objects to be measured. Manufacturers of polyimide are announcing not to apply polyimide directly for food, internal and body fluid.

External Dimensions for 900 series

90020B Material: SUS316			1200 t t t heat-resistant PVC
90021B Material: SUS316	90 00 00	N N N N N N N N N N N N N N N N N N N	1200 1200 Casesson () Casesson () Casess
90022B Material: SUS316	500	N N N N N N N N N N N N N N N N N N N	1200 120 12
90023B Material: SUS316			D 1200 Common PVC
90024B Material: SUS316			D 1200 CREMECT Silicon rubber
90029B		∗	





绿测科技有限公司

广州总部:广州市番禺区陈边村金欧大道83号江潮创意园A栋208室 深圳分公司:深圳市龙华区龙华街道油松社区东环一路1号耀丰通工业园1-2栋2栋607 南宁分公司: 广西自由贸易试验区南宁片区五象大道401号五象航洋城1号楼3519号 广州分公司:广州市南沙区凤凰大道89号中国铁建·凤凰广场B栋1201房 电话: 020-2204 2442 传真: 020-8067 2851 邮箱: Sales@greentest.com.cn 官网: www.greentest.com.cn



微信视频号

绿测科技订阅号

绿测工场服务号