# THERMOMETER CALIBRATOR

Model: TC-920 *ISO-9001, CE, IEC1010* 







The Art of Measurement

# with type K thermometer

# THERMOMETER CALIBRATOR

Model: TC-920

#### **FEATURES**

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* 2 in 1, one meter included " type k thermometer " &			
" type k thermocouple calibrator ".			
* Precision calibrator for type k thermometer, calibrating			
process devices and measuring process signals.			
* Wide range : -199 $^\circ\!\mathbb{C}$ to 1230 $^\circ\!\mathbb{C}$ ( -325 $^\circ\!\mathbb{F}$ to 2246 $^\circ\!\mathbb{F}$ ).			
* Microprocessor circuit assures high accuracy and			
provides special functions and features.			
* Build in temperature linearity compensation circuit,			
high precision.			
* $^{\circ}$ C & $^{\circ}$ F select & data hold function for the temperature			
measurement.			
* $^{\circ}$ C & $^{\circ}$ F select by the front button for the temperature			
calibrator.			
* Thermocouple sensor for Temp. measurement, fast			
response time.			
* RS 232 PC serial computer interface.			
* Temp. measuring input to meet any standard type K			
( NiCr-NiAl ) probe.			
* Fitted with standard type K input measuring socket.			
* Super large LCD display, easy reading.			
* Operates from 006P DC 9V battery.			
* Used the durable, long-lasting components, including			
a strong, light weight ABS-plastic housing case.			

Operating	0 $^{\circ}\mathrm{C}$ to 50 $^{\circ}\mathrm{C}$ ( 32 $^{\circ}\mathrm{F}$ to 122 $^{\circ}\mathrm{F}$ ).		
Temperature			
Operating	Less than 80% RH.		
Humidity			
Power Supply	006P DC 9V, MN1604/PP3 battery or		
	equivalent.		
	Heavy duty or Alkaline type.		
Power	Approx. DC 9 mA.		
Current			
Weight	280 g/0.62 LB ( included battery ).		
Size	185 x 78 x 38 mm ( 7.3 x 3.0 x 1.5 inch ).		
Accessories	Instruction Manual 1 PC.		
Included	Dual type k plug cable, DUK-021 PC.		
Optional	* Temperature probe, TP-01, TP-02A,		
Accessories	TP-03, TP-04.		
( Please ref.	* Carrying case, CA-03, CA-04.		
page 9)	* Software, SW-U801-WIN.		
	* RS232 cable, UPCB-01.		
	* USB cable, USB-01.		

# ELECTRICAL SPECIFICATIONS (23 ± 5 $^{\circ}$ C)

## Type K thermocouple Calibrator

Calibrator Range		Resolution	Accuracy
	-199.9 °C to -100.1 °C	0.1 ℃	± (1 % + 1 °C)
$^{\circ}\!\mathbb{C}$	-100.0 °C to 999.9 °C	0.1 ℃	± (0.5 % + 1 °C)
	1000 ℃ to 1230 ℃	1 ℃	
	-327 °F to -200 °F	1 °F	± (1 % + 2 °F)
	-199.9 °F to -148.1 °F	0.1 °F	
$^{\circ}\mathrm{F}$	-148.0 °F to 999.9 °F	0.1 °F	± (0.5 % + 2 °F)
	1000 °F to 2246 °F	1 °F	

### Thermometer, measure

The	ermometer Range	Resolution	Accuracy
	-199.9 °C to -100.1 °C	0.1 ℃	± (1 % + 1 °C)
$^{\circ}\!\mathbb{C}$	-100.0 °C to 999.9 °C	0.1 ℃	± (0.5 % + 1 °C)
	1000 °C to 1230 °C	1 ℃	
	-327 °F to -200 °F	1 °F	± (1 % + 2 °F)
	-199.9 °F to -148.1 °F	0.1 °F	
$^{\circ}\mathrm{F}$	-148.0 °F to 999.9 °F	0.1 °F	± (0.5 % + 2 °F)
	1000 °F to 2246 °F	1 °F	

The accuracy specification of thermometer applies only to the instrument itself and allowance must be made for limits of error permitted in thermocouple.

### GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI with		
	thermocouple linearity correction circuit.		
Display	14.8 mm (0.58") digit size. Super large LCD		
	display with annunciator.		
Function	2 in 1 :		
	Type k thermometer,		
	Type k thermocouple calibrator.		
Range	<i>Measure :</i> -199.9°C to 1230°C / - 327°F to 2246°F. <i>Calibrator</i>		
	-199.9℃ to 1230℃/ - 327°F to 2246°F.		
Polarity	' - ' indicates negative polarity.		
Thermometer	Sensor	Thermocouple K	
	Туре	( NiCr-NiAl ).	
	Input	10 Mega ohm.	
	Impedance		
Sampling	Approx. 1 second.		
Data Output	RS 232 PC serial computer interface.		
Over input	Indication of " ".		
indication			
	-		

<sup>\*</sup> Appearance and specifications listed in this brochure are subject to change without notice.