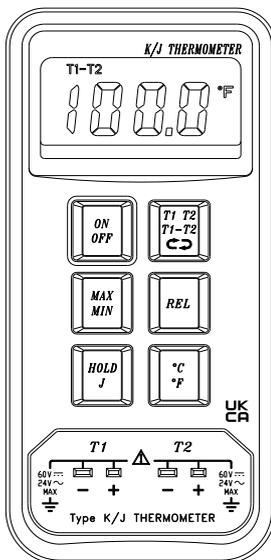


# **TES** DIGITAL THERMOMETER

## **TES-1306A** **INSTRUCTION MANUAL**



TES ELECTRICAL ELECTRONIC CORP.

### **1. SAFETY INFORMATION**

This instrument is a digital thermometer for use with any K/J-type thermocouple as temperature sensor. Temperature indication follows National Bureau of Standards and IEC584 temperature / voltage tables for K/J-type thermocouples.

- Read the following safety information carefully before attempting to operate or service the meter.
- Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.

#### **Environment conditions**

- ① Altitude up to 2000 meters
- ② Relatively humidity 90% max.
- ③ Operation Ambient 0 ~ 40°C

#### **Maintenance & Clearing**

- ① Repairs or servicing not covered in this manual should only be performed by qualified personnel.
- ② Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this instruments.

#### **Safety symbols**



Meter is protected throughout by double insulation or reinforced insulation.

When servicing, use only specified replacement parts.



Comply with EMC **UK CA**

## 2. SPECIFICATIONS

### 2-1 Electrical Specifications

Measurement Range :

Type J :

-200°C to 760°C

-328°F to 1400°F

Type K :

-200°C to 1370°C

-328°F to 2498°F

Resolution : 0.1°C , 1°C , 0.2°F , 2°F

Maximum Voltage at Thermocouple Input :

60V dc ,or 24Vrms ac

RF Field Derating :

Strong RF fields and low-frequency adversely affect accurate measurement .

Operating Temperature and Humidity:

0°C to 40°C (32°F to 104°F ) , 0 - 80% RH

Storage Temperature and Humidity:

-10°C to 60°C (14°F to 140°F ) , 0 - 70% RH

**Basic Accuracy:** ( @23± 5°C Calibration ) Accuracy are ± ( ...% of reading + degree ) at 18°C to 28°C with relative humidity up to 80%

For single thermocouple measurements

Function	Resolution	Range		Accuracy
		Type K	Type J	
°C	0.1°C	-200°C~-50°C	-200°C~-50°C	±(0.5%rdg+1.0°C)
		-50°C~0°C	-50°C~0°C	±(0.2%rdg+1.0°C)
		0°C~200°C	0°C~150°C	±(0.1%rdg+ 0.8°C)
	1°C	200°C~1370°C	150°C~760°C	±(0.2%rdg+ 2°C)
°F	0.2°F	-328°F~-58°F	-328°F~-58°F	±(0.5%rdg+ 2.0°F)
		-58°F~-32°F	-58°F~-32°F	±(0.2%rdg+ 2.0°F)
		32°F~392°F	32°F~302°F	±(0.1%rdg+1.6°F)
	2°F	392°F~2498°F	302°F~1400°F	±(0.2%rdg+3°F)

For T1-T2 Measurements accuracy is Basic accuracy add 0.2%rdg.

#### NOTE

The basic accuracy specification does not include the error of the probe. Please refer to the probe accuracy specification for additional details.