

### TECHNICAL DATA



### Features

- Displays up to 4 separate measurements simultaneously
- Accepts Type K, J, R, S, E, T thermocouple and RTD probes
- Temperature differential (T1-T2), Max/Min and Data hold functions
- User selectable °C, °F
- Real-time data logger with integral SD memory card
- User selectable sampling rate from 1 to 3600 seconds
- Large, easy-to-read backlit LCD display
- Optional PC software features live tracking via USB connection
- Tripod mount for long-term monitoring
- Low battery indicator and auto shut off
- Includes battery

### Specifications

#### Thermocouple

Ranges:

- Type K: -148 to 2372°F (-100 to 1300°C)
- Type J: -148 to 2102°F (-100 to 1150°C)
- Type T: -148 to 752°F (-100 to 400°C)
- Type E: -148 to 999.9°F (-100 to 900°C)
- Type R: 32 to 3092°F (0 to 1700°C)
- Type S: 32 to 2732°F (0 to 1500°C)

Accuracy:

- Type K:  $\pm (0.4\% + 1^\circ\text{F}) / \pm (0.4\% + 0.5^\circ\text{C})$
- Type J:  $\pm (0.4\% + 1^\circ\text{F}) / \pm (0.4\% + 0.5^\circ\text{C})$
- Type T:  $\pm (0.4\% + 1^\circ\text{F}) / \pm (0.4\% + 0.5^\circ\text{C})$
- Type E:  $\pm (0.4\% + 1^\circ\text{F}) / \pm (0.4\% + 0.5^\circ\text{C})$
- Type R:  $\pm (0.5\% + 2^\circ\text{F}) / \pm (0.5\% + 1^\circ\text{C})$
- Type S:  $\pm (0.5\% + 2^\circ\text{F}) / \pm (0.5\% + 1^\circ\text{C})$

Resolution: 0.1 or 1°F/°C

#### RTD

Range: -327.9 to 1562°F (-199.99 to 850°C)

Accuracy:  $\pm(0.4\% + 1.8^\circ\text{F}) / \pm (0.4\% + 1^\circ\text{C})$

Resolution: 0.1 or 1°F/°C

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### SD-947DELUXE

#### Thermocouple Thermometer Kit

Includes:

SD-947 Thermocouple Thermometer,  
R2920 Surface Thermocouple Probe,  
R2940 Air/Gas Thermocouple Probe,  
R2950 Immersion Thermocouple Probe,  
R2960 Needle Tip Thermocouple Probe, and  
MC-2 Attache-style carrying case



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#### General Specifications

Type:	4-Channel, Thermocouple, 2-Channel RTD
Response Time:	1x/sec
Display:	Quad Display, LCD
Backlit Display:	Yes
Data Hold:	Yes
Min:	Yes
Max:	Yes
Differential Measurement (T1-T2):	Yes
Datalogging Capabilities:	Yes
Real-Time Clock and Date Stamp:	Yes
Selectable Sampling Rate:	Yes (1, 2, 5, 10, 30, 60, 120, 300, 600, 1800, 3600s)
External Memory:	Yes, expandable up to 16Gb with SD card (optional)
Auto Shut-off:	Yes (after 10 mins/off)
Kick Stand:	Yes
Tripod Mountable:	Yes
Low Battery Indicator:	Yes
Power Supply:	6 x AA batteries or AC Adapter
Output:	Yes (AC)
PC Connectivity:	USB Cable (optional)
Software:	SW-U801-WIN
Software OS Compatibility:	Windows XP / Vista / 7
Product Certifications:	CE
Operating Temperature:	32 to 104°F (0 to 40°C)
Storage Temperature:	14 to 140°F (-10 to 60°C)
Operating Humidity:	10-90%
Dimensions:	7.0 x 2.7 x 1.9" (177 x 68 x 45mm)
Weight:	1.1lbs (515g)



Model	Description
SD-947	Thermocouple Thermometer
SD-947DELUXE	Thermocouple Thermometer Kit
SD-947-RTD	PT100 RTD Temperature Probe
TP-01	Type K Thermocouple Wire Probe
R2920	Surface Thermocouple Probe
R2930	Right Angle Thermocouple Surface Probe
R2940	Air/Gas Thermocouple Probe
R2950	Immersion Thermocouple Probe
R2960	Needle Tip Thermocouple Probe
SD-4GB	4GB SD Memory Card
AP-9VA-110V	AC Adapter
USB-01	USB Cable
R1500	Tripod
CA-05A	Soft Carrying Case
SD-947-NIST	Thermocouple Thermometer & NIST