

INTRODUCTION

The TDM-120P is a 2-in-1 thermal imager and 20000-count digital multimeter, designed for electricians, maintenance engineers, and technicians who need to quickly and safely identify electrical issues. By combining voltage, resistance, and temperature measurements with advanced thermal imaging, it helps users detect overheating areas, loose wires, uneven power loads, worn or damaged parts, and overcurrent without manual inspection. An auto-tracking function highlights the center point of high and low temperatures for faster heat source location, making troubleshooting more efficient, precise, and safer. Lightweight and portable, the TDM-120P streamlines field diagnostics and maintenance work.

FEATURES

- 2-in-1 digital multimeter with built-in thermal imager
- 20000-count meter for versatile electrical measurements: voltage, current, resistance, capacitance, diode testing, etc.
- Auto tracking of center point
- High/low temperature alarm
- 32GB image storage
- 2.8-inch LCD touchscreen with a 90° flip-out stand
- Languages: English/Chinese



TDM-120P



TDM-120



**Seven color palettes Show every detail clearly**

**2.8-inch LCD Touchscreen Tap to Control Easily**

|                       |             |            |           |            |            |            |                  |
|-----------------------|-------------|------------|-----------|------------|------------|------------|------------------|
| Color Palette Options | Lava        | Black Hot  | White Hot | Arctic     | Hot Iron   | Iron Red   | Rainbow          |
| Measurement Modes     | Capacitance | Continuity | Diode     | DC Voltage | AC Voltage | Resistance | Auto Measurement |

**[Application Scenarios]**

**[One-Click Save] Easily Export via USB**  
Quickly transfer to your PC—fast and hassle-free.

Image Transfer Firmware Updates

USB Sharing

**TECHNICAL SPECIFICATIONS**

| Digital Multimeter (TDM-120P Supported) |                                                                                                                                                               |                     |                                                                             |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------|
| Overvoltage Category                    | CAT III 600V                                                                                                                                                  | Display Count       | 20000                                                                       |
| DC Voltage (V)                          | 1.9999V/19.999V/199.99V/1000V<br>Accuracy: $\pm(0.5\%+3)$                                                                                                     | AC Voltage (V)      | 1.9999V/19.999V/199.99V/<br>750.0V Accuracy: $\pm(1\%+3)$                   |
| Resistance ( $\Omega$ )                 | 19.999K $\Omega$ /199.99K $\Omega$ /1.9999M $\Omega$ /19.999M $\Omega$ Accuracy: $\pm(0.5\%+3)$<br>199.99 $\Omega$ /1.9999K $\Omega$ Accuracy: $\pm(2.0\%+3)$ |                     |                                                                             |
| Capacitance (F)                         | 999.9 $\mu$ F/99.99 $\mu$ F/9.999 $\mu$ F/999.9nF/99.99nF/9.999nF Accuracy: $\pm(2.0\%+5)$<br>9.999mF/99.99mF Accuracy: $\pm(5.0\%+20)$                       |                     |                                                                             |
| Diode                                   | ✓                                                                                                                                                             |                     |                                                                             |
| Continuity                              | ✓                                                                                                                                                             |                     |                                                                             |
| Thermal Imager                          |                                                                                                                                                               |                     |                                                                             |
| IR Resolution                           | 120*90                                                                                                                                                        | Field of View       | 50°                                                                         |
| Temperature                             | -20°C~400°C                                                                                                                                                   | Thermal Sensitivity | <60mk                                                                       |
| Frame Rate                              | $\leq 25$ Hz                                                                                                                                                  | Spectral Range      | 8 $\mu$ m~14 $\mu$ m                                                        |
| Accuracy                                | $\pm 2^\circ\text{C}$ or $\pm 2\%$ (max value measured)                                                                                                       | Emissivity          | 0.01-1 adjustable                                                           |
| Detection Distance                      | 0.5~3 m                                                                                                                                                       | Image Storage       | 32 G                                                                        |
| Temperature Display                     | Center point, high/low temperature<br>auto-tracking                                                                                                           | Color Palette       | Arctic / Hot Iron / Iron Red /<br>Rainbow / Lava / Black Hot /<br>White Hot |
| High/Low Temperature Alarm              | ✓                                                                                                                                                             |                     |                                                                             |

**GENERAL CHARACTERISTICS**

|                     | TDM-120P                     | TDM-120 |
|---------------------|------------------------------|---------|
| Product Net Weight  | 216g                         | 203g    |
| Carton Gross Weight | 18 kg                        | 14.5 kg |
| Display             | 2.8-inch touchscreen         |         |
| Battery             | 3.7V/1500mAh lithium battery |         |
| Product Size        | 118*78*28 mm                 |         |
| Product Color       | Graphite Grey                |         |
| Standard Carton     | 53*38*30.5 cm                |         |
| Quantity Per Carton | 40 PCS                       |         |