TECHNI-PRO

Product Data Sheet

True RMS Compact Multimeter

TNP101



Features

- Functions include AC/DC voltage and current, resistance, capacitance, frequency, duty cycle, continuity, and diode testing
- Easy to hold only 4.7"H x 2.6"W x 1.8"D
- Maximum voltage: 600V AC/DC
- Maximum current: 10A AC/DC
- 4000-count negative display
- Double molded plastic housing water-resistant, rugged design
- CAT III 600V
- Auto-ranging

Product Information

The Techni-Pro **TNP101** is built to withstand demanding electrical environments, featuring a rugged, water-resistant double-molded plastic housing for durability and longevity. With a CAT III 600V rating, you can trust it for a wide range of applications, ensuring safety and accuracy in your measurements.

Included

Multimeter

Test leads

Instruction manual

AAA batteries (x2)

Accessories

TNPBG2 bag

TNPAL286 alligator clips

20001412 fuse (500mA/600V)

20001413 fuse (10A/600V)

| General Specifica | ations |
|------------------------|--|
| Enclosure | Double molded |
| Shock (Drop Test) | 6.5 feet (2 meters) |
| Diode Test | Test current of 1.5mA maximum, open circuit voltage 3V DC typical |
| Continuity Check | Audible signal will sound if the resistance is less than 50 Ω (approx.) test current <0.35mA0 |
| Input Impedance | >10M Ω VDC & >10M Ω VAC |
| AC Response | TRMS |
| ACV Bandwidth | 50/60HZ (All wave); 45 to 1000Hz (Sine wave) |
| Crest Factor | <3 at full scale up to 300V, decreasing linearly to <1.5 at 600V |
| Display | 4,000 count Negative Display |
| Overrange Indication | "OL" is displayed |
| Auto Power Off | 15 minutes (approx.) with disable feature |
| Polarity | Automatic (no indication for positive); Minus (-) sign for negative |
| Measurement Rate | 3 times per second, nominal |
| Low Battery Indication | " is displayed if battery voltage drops below operating voltage |
| Battery | 2 x 1.5V AAA battery |
| Fuses | mA/μA ranges: 0.5A 600V ceramic fast blow; A range: 10A/600V ceramic fast blow |
| Operating Temperature | 5 to 40°C (41 to 104°F) |
| Storage Temperature | -20 to 60°C (-4 to 140°F) |
| Operating Humidity | Max 80% up to 31°C (87°F) decreasing linearly to 50% at 40°C (104°F) |
| Storage Humidity | <80% |
| Operating Altitude | 2000 meters (7000 ft.) maximum |
| Weight | 342g (0.753lb) |
| Size | 120 x 67 x 46mm |
| Safety | EN61010-1:2010+A1:2019, EN61010-2- 033:2012 for measurement Category III 600V, Polution Degree 2. BS EN 61010-1:2010+A1:2019 and BS EN 61010-2-033:2012. |

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Accuracy Specifications

| DC Voltage | | |
|------------|------------|--------------------|
| Range | Resolution | Accuracy |
| 400mV | 0.1mV | ±(1.0% +5 digits) |
| 4V | 0.001V | |
| 40V | 0.01V | ±(1.0% + 3 digits) |
| 400V | 0.1V | ±(1.0% + 3 digits) |
| 600V | 1V | |

| AC Voltage (50 to 60Hz) | | |
|-------------------------|------------|---------------------|
| Range | Resolution | Accuracy |
| 4V | 0.001V | |
| 40V | 0.01V | ±/1 20/ + 2 digits) |
| 400V | 0.1V | ±(1.2% + 3 digits) |
| 600V | 1V | |

All AC voltage ranges are specified from 5% of range to 100% of range.

| DC Current | | |
|------------|------------|---------------------|
| Range | Resolution | Accuracy |
| 400μΑ | 0.1μΑ | |
| 4000μΑ | 1μΑ | 1/1 O0/ 1 2 dicital |
| 40mA | 0.01mA | ±(1.0% + 3 digits) |
| 400mA | 0.1mA | |
| 4A | 0.001A | 1/1 20/ 1 2 dicital |
| 10A | 0.01A | ±(1.2% + 3 digits) |

20A: 30 sec max with reduced accuracy.

| AC Current (50 to 60Hz) | | |
|-------------------------|------------|---------------------|
| Range | Resolution | Accuracy |
| 400μΑ | 0.1μΑ | |
| 4000μΑ | 1μΑ | ±(1.2% + 3 digits) |
| 40mA | 0.01mA | ±(1.2% + 3 digits) |
| 400mA | 0.1mA | |
| 4A | 0.001A | ±/1 00/ 5 digits) |
| 10A | 0.01A | ±(1.8% + 5 digits) |

20A: 30 sec max with reduced accuracy.

All AC voltage ranges are specified from 5% of range to 100% of range.

| Resistance | | |
|------------|------------|---------------------|
| Range | Resolution | Accuracy |
| 400Ω | | |
| 4kΩ | 0.001kΩ | |
| 40kΩ | 0.01kΩ | ±(1.5% + 5 digits) |
| 400Ω | 0.1kΩ | |
| 4ΜΩ | 0.001ΜΩ | |
| 40ΜΩ | 0.01ΜΩ | ±(2.5% + 20 digits) |

| Capacitance | | |
|-------------|------------|---------------------|
| Range | Resolution | Accuracy |
| 40nF | 0.01nF | ±(4.5% + 10 digits) |
| 400nF | 0.1nF | ±(4.5% + 10 digits) |
| 4μF | 0.001μF | |
| 40μF | 0.01μF | ±(3.0% + 5 digits) |
| 400μF | 0.1μF | |
| 4000μF | 1μF | ±(5% + 5 digits) |

| Frequency (Electrical) | | |
|------------------------|------------|-----------------|
| Range | Resolution | Accuracy |
| 10.00-10kHz | 0.01Hz | ±(1.2% reading) |

Sensitivity: 15V rms

| Duty Cycle | | |
|--------------|------------|--------------------|
| Range | Resolution | Accuracy |
| 0.1 to 99.9% | 0.1% | ±(1.2% + 2 digits) |

Pulse width: 100µs-100ms; Frequency: 5Hz to 150kHz

Note: Accuracy is stated at 18 to 28°C (65 to 83°F) and less than 75%RH.

Note: Accuracy specifications consist of two elements:

- (% reading) -This is the accuracy of the measurement circuit.
- (+ digits) -This is the accuracy of the analog to digital converter.

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