



## VPC-31 Voltage & Continuity Tester

Rugged and easy to use testers for live voltage and continuity checks. Built in shaker provides the same functionality and feel as older analog solenoid testers with benefit of full input protection to CAT IV 600V / CAT III 1000V.

- Super-bright bi-Color LED's indicates safe and dangerous voltages (above 55VDC or 30VAC)
- Auto hold feature - LED's stay illuminated for 10 sec retaining a reading after the tests are disconnected
- Solenoid tester-like shaker to indicate AC voltage presence
- Automatically turns ON and OFF for easy and quick measurements
- Non-contact voltage detection and GFCI test feature for testing GFCI receptacles and breakers
- Standard detachable test lead (black) for easy replacement with optional longer or specialized probe
- Automatically selects AC Voltage, DC Voltage or Continuity
- LED's indicate 10 levels of AC and DC Voltages::
  - Volts (AC) 24, 48, 120, 208, 240, 277, 347, 480, 600, 1000
  - Volts (DC) 6, 12, 24, 36, 48, 60, 72, 110, 220, 380
- Auto backlit LCD Digital Display for precise voltage measurements
- Continuity buzzer and Visual continuity indication (LED)
- Water and dust proof, IP65 design
- Safety CAT IV 600 V, CAT III 1000 V

### No hassle warranty

*No waiting.*

*No shipping charges.*



Our commitment to high-quality products and customer service is demonstrated by our industry exclusive "No Hassle" warranty. In the unlikely event that an Amprobe Test Tool requires warranty service, any of our local dealers are authorized to replace it, on the spot.

(note: \$500 MSLP limit)



## VPC-31 Voltage & Continuity Tester

## Data Sheet

### Specifications

<b>LCD Display</b>	3 digits 1000 counts In an RF Field of 3V/m, total accuracy = Specified accuracy + 45d. Performance above 3V/m is not specified
<b>Update Rate</b>	5 per second nominal
<b>Operating Temperature</b>	-10°C ~ 55°C (14°F ~ 131°F)
<b>Relative Humidity</b>	Maximum relative humidity 80% for temperature up to 31°C (87°F) decreasing linearly to 50% relative humidity at 55°C (131°F)
<b>Altitude</b>	Operating below 2000m
<b>Storage Temperature</b>	-20°C ~ 60°C (-4°F ~ 140°F), < 80% R.H. (with battery removed)
<b>Temperature Coefficient</b>	Nominal 0.15 x (specified accuracy)/°C @ (-10°C ~ 18°C or 28°C ~ 55°C), or otherwise specified
<b>Sensing</b>	Average sensing
<b>Type of Protection</b>	IP65
<b>Pollution Degree</b>	2
<b>E.M.C.</b>	Meets EN61326-1:2006 (EN55022, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11): For both models: Performance is specified in an RF Field of 3V/m. Performance above 3V/m is not specified.
<b>Safety</b>	Meets EN61010-1 and IEC61010-1 2nd Edition (2001)
<b>Measurement Category</b>	CAT III 1000V & CAT IV 600V AC & DC
<b>Transient Protection</b>	8kV lightning surge (1.2/50 $\mu$ s)
<b>Overload Protection</b>	1000VDC & VAC rms
<b>Low Battery</b>	Below approx. 2.4V
<b>Power Supply</b>	Standard 1.5V AAA Size (NEDA 24G or IEC R03) battery X 2; or 1.5V AAA Size (NEDA 24A or IEC LR03) alkaline battery X 2
<b>Power Consumption (typical)</b>	3mA at Power-on ready; 30mA at 1000VAC full LED indication. 75mA at 1000VAC with shaker ON
<b>APO Consumption (typical)</b>	10 $\mu$ A
<b>APO Timing</b>	Idle for 30 seconds
<b>Dimension</b>	233(L) x 57(W) x 40(H)mm (9.17 x 2.24 x 1.57 in)
<b>Weight</b>	Approx. 220 g (0.485 lb)
<b>Special Features</b>	High Input Impedance, Indicator Self-Test, Auto-Hold, Overload-Alert Warning, EF-Detection, Auto Display Backlit, AC-Detection Shaker, Bi-Color LED Hazardous Live Warning, and GFCI Leakage Load
<b>Accessories</b>	Detachable (Black) Test Lead, Screw-on Stationary (Red) Probe, 2 Screw-on 4mm Probe Tips, batteries installed and User's manual

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### Electrical Specification

Accuracy is given as +/- (% of reading digits + number of digits) or otherwise specified @ 23oC +/- 5oC and less than 75% R.H

#### DC & AC Voltage (LED)

DCV MARKING	Typical Threshold	ACV MARKING	Typical Threshold
6V	5V	24V	19V
12V	10V	48V	38V
24V	19V	120V	96V
36V	30V	208V	166V
48V	42V	240V	224V
60V	54V	277V	259V
72V	66V	347V	312V
110V	91V	480V	414V
220V	176V	600V	540V
380V	304V	1000V	800V

**Input Impedance** 460k, 160pF nominal

**ACV Frequency Response** 45Hz ~ 65Hz

**Duty ratio** Continuous duty

#### Audible Continuity

**Open Circuit Voltage** 0.4VDC typical

**Audible Threshold** between 50k and 2000k

#### DC & AC Voltage

Range	Typical Threshold	Accuracy
DC 999V	> +5VDC or < -5VDC	1.0%+2d
AC 999V (50Hz/60Hz)	> 15VAC	2.5%+4d

**Input Impedance:** 460k, 160pF nominal

**Duty ratio:** Continuous duty

#### AC Detection Shaker Threshold

**Shaker ON** > 24VAC nominal

**Shaker OFF** < 14VAC nominal

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<b>GFCI Leakage Load</b>	GFCI Leakage Load feature is for 120V nominal circuits only. It is disabled above 132V and below 80V
<b>Load Current</b>	7.5 mA typical at 120V
<b>Path Impedance</b>	16 k nominal, PTC protected

### Non-Contact EF-Detection

<b>Indication</b>	EF LED flashing & audible beep tones proportional to the field strength
<b>Detection Frequency</b>	50/60Hz
<b>Detection Antenna</b>	Top end of the meter
<b>Probe-Contact EF-Detection</b>	For more precise indication of live wires, such as distinguishing between live and ground connections, use the Red (+) test probe for direct contact measurements.

VPC-31 also displays Bar graph segments proportional to the field strength on LCD. Typical values are shown in the following table:

Typical Non-Contact Voltage Range	LCD Bar Graph Indication
15V to 55V	-
30V to 95V	--
55V to 170V	---
Above 120V	----

### Included Accessories

- Test Leads
- Carrying Case
- Bead Type,
- Thermocouple with banana plug
- Users Manual



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