

The 620A-4 Igniter Circuit Tester & Fail-Safe Ohmmeter



The gold standard in ultra-safe resistance testing.

The 620A-4 Igniter Tester is a portable digital ohmmeter specifically designed for ultra-safe resistance testing on explosive devices. Approved by the USAF Non-nuclear Munitions Safety Board and compatible with our RS232C Interface (OP-232), this product is the safest and easiest to use in its field.

The AMPTEC 620A-4 offers fail-safe current limiting resistor network circuitry to ensure that instrument test currents cannot exceed 8 mA. In the unlikely event of a component failure, the output current limiting network would still be in effect. If the 620A-4 had an electrical fault, it offers the life-saving advantage of failing safely.

The 620A-4 leads a lineage of intrinsically safe igniter circuit testers in the 620 Series product line, enabling you to take high-accuracy resistance measurements across virtually any range from 2 Ω to 20 M Ω .

Every AMPTEC product is proudly made from start to finish in the USA and comes with a one-year warranty, plus an N.I.S.T calibration certificate with data at no extra cost.



AMPTEC 620A-4 Igniter Circuit Tester Datasheet

The below specifications apply to units that are purchased as a part of our 620A-4 Commercial Package with no additional options. For information on the specifications of units with additional options, please refer to the following page.

AMPTEC 620A-4 Range, Resolution, Accuracy, & Current Levels

| | | | | |
|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Range | 20 Ω | 200 Ω | 2000 Ω | 20 KΩ |
| Nominal Current | 5 mA | .5 mA | 50 uA | 5 uA |
| Failsafe Current | 8 mA | 8 mA | 8 mA | 8 mA |
| Resolution | 1 mΩ | 10 mΩ | 100 mΩ | 1 Ω |
| Accuracy | ± .02% of reading & range |

AMPTEC 620A-4 General Specifications

| | |
|--|--|
| Display 4 ½ digit LED display | Dimensions 9.75" x 10" x 3.25" |
| Input Voltage 4.8 VDC maximum | Internal Voltage 250 VDC maximum |
| Low Battery Display reads "—" | Open Circuit 1.6 VDC |
| Overload/Overrange Display flashes | Terminal Banana jack binding posts |
| Temperature Coefficient ... ± 0.002% per 1° C | Temperature Limit (Operating) 0° to 50° C |
| Temperature Limit (Storage) -20° to 70° C | Update Rate 3 readings per second |
| Weight (Standard Version) 3.5 lbs. | |

AMPTEC 620A-4 Power Specifications

| | |
|---|--|
| Batteries 4ea 5000 mAh NICAD batteries | Battery Charge Time ~8 hrs. til full charge |
| Battery Charger AMPTEC 620-DC | Battery Charger Charging Current 2A max |
| Battery Charger Input 90 – 264 VAC | Battery Life 1000 cycles or 3 years |
| Battery Charger Output 5.9V | |

AMPTec 620A-4 Igniter Circuit Tester Datasheet Continued

OP-247 Optically Isolated Power Specifications

This option enables your unit to be ran via AC power, allowing for uninterrupted use. Unless otherwise noted in the table below, all other specifications match those listed in the general specifications section.

| | | | |
|----------------------|---------------|---------------------|---------|
| AC/DC adaptor | AMPTec 247-DC | Adaptor input | 120VAC |
| Adaptor output | 24 VDC | Unit Weight | 2.3 lbs |

OP-232 RS232C Interface Specifications

This option enables your unit to connect to a computer and receive commands via RS232C.

| | | | |
|------------------|----------------|--------------------------|-------------------------|
| Connection | DE-9 connector | Rear terminal block | 4 Gold-Plated terminals |
|------------------|----------------|--------------------------|-------------------------|

Op-519 Rack Mount Specifications

This option, OP-519S (for single units) and OP-519D (for dual units), allows your unit to be rack mounted. Unless otherwise noted in the table below, all other specifications match those listed in the general specifications section.

OP-519S (Single Unit)

| | |
|------------------|----------------------------|
| Dimensions | 19" x 3.5" x 10" |
| Materials | ABS plastic face, aluminum |
| Weight | 2.3 lbs (plus unit weight) |

OP-519D (Dual Units)

| | |
|------------------|-----------------------------|
| Dimensions | 19" x 3.5" x 10" |
| Materials | ABS plastic face, aluminum |
| Weight | 2.1 lbs (plus unit weights) |



AMPTec 620A-4 Ordering Information

| | |
|--------------------|---|
| 620A-4 COMM | Igniter tester, OP-300 leads, OP-401 leads, OP-110 lead pouch, 620-DC battery charger, N.I.S.T. calibration certificate |
| 620A-4 NSN | Igniter tester, OP-100 transit case, OP-290 leads, OP-430 adapter, 620-DC battery charger, N.I.S.T. calibration certificate |
| OP-100 | Meter transit/hard shell case |
| OP-110 | Test lead storage pouch |
| OP-232 | RS232C computer Interface |
| OP-247 | Optically isolated power |
| OP-290 | Alligator clip test lead set |
| OP-300 | Gold plated 4-Wire Kelvin clip leads |
| OP-302 | 5-way banana jack backed Kelvin clips |
| OP-401 | Gold plated single tip Kelvin probes |
| OP-519S | Single rack mount tray |
| OP-519D | Dual rack mount tray |

The above is only a small selection of the accessories that are compatible with the 620A-4 meter. For a full list or pricing information, please contact us via our website: www.amptec.com