

The 620EH Igniter Circuit Tester & Fail-Safe Ohmmeter



The gold standard in ultra-safe resistance testing.

The 620EH 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 620EH 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 620EH had an electrical fault, it offers the life-saving advantage of failing safely.

The 620EH is part of 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 620EH Igniter Circuit Tester Datasheet

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

AMPTEC 620EH Range, Resolution, Accuracy, & Current Levels

Range	2 Ω	20 Ω	200 Ω	2 M Ω
Nominal Current	5 mA	5 mA	0.5 mA	50 nA
Failsafe Current	8 mA	8 mA	8 mA	8 mA
Resolution	100 $\mu\Omega$	1 m Ω	10 m Ω	100 Ω
Accuracy	$\pm .02\%$ of reading & $\pm .05\%$ of range	$\pm .02\%$ of reading & range	$\pm .02\%$ of reading & range	$\pm 1\%$ of reading & $\pm 0.2\%$ of range

AMPTEC 620EH 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 ...	$\pm 0.002\%$ 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 620EH 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 620EH 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
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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)	OP-519D (Dual Units)
Dimensions	Dimensions
Materials	Materials
Weight	Weight



AMPTec 620EH Ordering Information

620EH	Igniter tester, OP-300 leads, 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 620EH meter. For a full list or pricing information, please contact us via our website: www.amptec.com