

The 620RK Igniter Circuit Tester & Fail-Safe Ohmmeter



The gold standard in ultra-safe resistance testing.

The 620RK Igniter Tester is a portable digital ohmmeter specifically designed for ultra-safe resistance testing on explosive devices. This unit comes outfitted with an RS232C Interface with a remote button on the front panel and Optically Isolated Power for uninterrupted usage. Approved by the USAF Non-nuclear Munitions Safety Board and ISO 9001:2015 certified, you can be assured that this instrument is the safest and highest quality available.

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

The 620RK 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 620RK Igniter Circuit Tester Datasheet

The below specifications apply to units that are purchased as a part of our standard configuration 620RK with no additional options or modifications. For information on the specifications of units with additional options or modifications, please refer to the appropriate section.

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

Range	20 Ω	200 Ω	200 KΩ
Nominal Current	5 mA	0.5 mA	0.5 uA
Failsafe Current	8 mA	8 mA	8 mA
Resolution	1 mΩ	10 mΩ	10 Ω
Accuracy	± .02% of reading & range	± .02% of reading & range	± .05% of reading & range

AMPTEC 620RK General Specifications

Display 4 ½ digit LED display	Dimensions 9.75" x 10" x 3.25"
Overload/Overrange Display flashes	Open Circuit 1.6 VDC
Temperature Coefficient ... ± 0.002% per 1° C	Terminal Banana jack binding posts
Temperature Limit (Storage) -20° to 70° C	Temperature Limit (Operating) 0° to 50° C
Weight (Standard Version) 2.4 lbs.	Update Rate 3 readings per second

OP-247 Optically Isolated Power Specifications

This option enables your unit to be ran via AC power, allowing for uninterrupted use. OP-247 comes standard with every 620RK igniter tester.

AC/DC adaptor AMPTEC 247-DC	Adaptor input 120VAC
Adaptor output 24 VDC	

OP-232 RS232C Interface Specifications

This option enables your unit to connect to a computer and receive commands via RS232C. OP-232 comes standard with every 620RK igniter tester.

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 19" x 3.5" x 10"	Dimensions 19" x 3.5" x 10"
Materials ABS plastic face, aluminum	Materials ABS plastic face, aluminum
Weight 2.3 lbs (plus unit weight)	Weight 2.1 lbs (plus unit weights)

AMPTEC 620RK Igniter Circuit Tester Ordering Information

The below is a comprehensive list of every available AMPTEC brand accessory and modification that is compatible with the 620RK Igniter Tester. Please [contact us](#) for pricing or questions about a custom accessory/modification.

General 620RK Ordering Information

SKU	Description
620RK	Igniter tester, OP-232 RS232C interface, OP-247 optically isolated power, OP-300 leads, and 247-DC power cord, N.I.S.T. calibration certificate

620RK Compatible Accessories

SKU	Description	Notes
247-DC	Power cord for meters with OP-247	Incl. with unit purchase
OP-100	Hard shell transit case for unit	
OP-110	Test lead storage pouch	
OP-290	4' Alligator clip test lead set	
OP-291	4' Dual banana jack to single banana jack lead set	
OP-300	4' Gold plated 4-Wire Kelvin clip leads	Incl. with unit purchase
OP-302	5-way Banana jack backed Kelvin clips (no cable incl.)	
OP-304	4' Banana jack calibration lead set	
OP-304AC	Version of OP-304 lead set with alligator clips instead of banana jacks	
OP-350	4' Kelvin with large jaw/clamp lead set	
OP-401	4' Gold plated single tip Kelvin probes	
PG-401	Pistol grip version of OP-401 probe set	
OP-402	4' Surface mount sized Kelvin micro probe set	
OP-403	4' Kelvin mini spear probe set	
OP-430	Amphenol connector adapter	

620RK Compatible Modifications

SKU	Description
OP-CC	Conformal coating of all internal PCB
OP-RFI	Installation of internal conductive and conformal coating to reduce RFI
OP-RPI	Installation of reverse polarity switch
OP-500	Installation of Isolated Analog Output
OP-519	Modifies unit to fit rack mount, includes hardware and face plate(s), OP-519S designation for single unit and OP-519D designation for dual units