

# 4314 KV & 4314 KVS Rugged Digital Igniter Testers

## Precision, Portability, Protection

- Certified Mil Std 810 – Method 511  
*(Safe for Explosive & Volatile Atmospheres)*
- Complies to (EWR) 127-1, Section 3.13.8.1-2
- Reduced Current (8mA Max)
- No-Hassle Constant Test Current Monitoring
- Real Time Fail-Safe Check
- Dust and Water Resistant – IP68
- Wide Range 2Ω - 2MΩ
- .1mΩ Resolution
- Certificate of N.I.S.T. traceability



Designed to safely test explosive and volatile devices in the harshest environments, our models 4314 KV and 4314 KVS are some of the most rugged and reliable adaptations of our storied Alpha 4314 igniter tester line. Featuring our proprietary internal circuitry, this 4-wire ohmmeter has a range of applications from the testing of fuses, squibs, and circuits to explosive bolts and release mechanisms. These units come housed in a rugged, dust and water-resistant case with IP68 rating making them an ideal fit for field use. Both the 4314 KV and 4314 KVS cover eight ranges from 2 to 2M ohms while running for up to 10 hours on a single charge.

The difference between these two units is the current monitoring display and Fail-Safe Test function that come standard on the KVS model. The current display will indicate the value of the source current being used by the tester. The display will indicate the measured value of the current on ranges 2Ω to 20kΩ and the nominal value of the current. The Fail-Safe Test feature that allows for real time verification of the fail-safe current. When the Fail-Safe test button is pressed, the unit disconnects the source terminals from the internal circuitry, simulates a worst-case scenario failure, and measures the source current.

Rng #	Range	Resolution	Test Current	Fail-Safe Current	Accuracy
0	2Ω	100μΩ	5mA	8mA	± 0.03% of reading ± 0.02% of range
1	20Ω	1mΩ	5mA	8mA	± 0.03% of reading ± 0.02% of range
2	200Ω	10mΩ	500μA	1.8mA	± 0.03% of reading ± 0.02% of range
3	2kΩ	100mΩ	50μA	180μA	± 0.03% of reading ± 0.02% of range
4	20kΩ	1Ω	5μA	18μA	± 0.03% of reading ± 0.02% of range
5	200kΩ	10Ω	500nA	1.8μA	± 0.05% of reading ± 0.05% of range
6	2MΩ	100Ω	50nA	180nA	± 1% of reading ± 0.2% of range



### General Specifications

- Display Type: 4 ½ digits LEDs (19999)
- Overload Indication: O. L.
- Conversion Rate: 3 readings per second
- Terminal Configuration: 4-Wire Kelvin
- Current Source Compl. Voltage: Clamped at 1.6V

### Power

- Power: 4 "D" Cell 1.2V recharg. NiMH Batteries 10000mAh
- Battery charger: 6VDC at 1A nominal

### Temperature

- Temperature Coefficient: ±0.002% per °C (from 0°C-15°C and 35°C-50°C)
- Operating Temp. Range: 0°C to 50°C
- Storage Temp. Range: -10°C to 70°C

### Physical Specifications

- Width: 10.6in / 27cm
- Depth: 9.5in / 24cm
- Height: 4.8in / 12.5cm
- Weight: 5.5 lbs / 2.5 kg net