# A NEW ERA OF PROTECTION

# 4314Ki Wide-Range, Ultra-Safe Digital Igniter Tester

Featuring the intrinsically-safe internal circuitry of our storied 4314 igniter tester line, the 4314Ki begins the next generation of precision measurement instruments. Covering a wide 8-measurement range, the Ki is an ideal fit aerospace, defense, and manufacturing applications.

The 4314Ki incorporates redundant fail-safe, current-limiting network circuitry ensuring the instrument test currents cannot exceed the

specified amount, even in the unlikely event of a worst-case component failure.

The 4314Ki introduces a variety of new features including Dual Power Mode, which offers the operator either 18 hours of battery life or 24/7 continuous power with the ability to change via key switch on the rear of the unit. The key switch acts as an additional safety feature, preventing non-authorized users from changing modes.

The rear isolated serial interface allows for remote control of the unit through an RS-232 port on the back panel.

Digital signals are transmitted across the isolation barrier using iCoupler technology. Via the interface, the user can fully operate the meter and query measurement and configuration data.



# **Key Features**

- Reduced Current (8mA Max)
- Wide Range  $2\Omega 20M\Omega$
- 0.1mΩ Resolution
- Rechargeable Battery-Operated NiMH 10AH
- Safe 24/7 Continuous Power Mode with Key Switch
- Fully Remote Controllable via Serial Interface
- Certificate of NIST Traceability
- Complies to (EWR) 127-1, Section 3.13.8.1-2
- Certified Mil Std 810 Method 511 Safe for Explosive & Volatile Atmospheres

#### Range Specifications

Rng #	Range	Resolution	Test Current	Failsafe Current	Accuracy
1	2Ω	100μΩ	5mA	8mA	± 0.03% of reading ± 0.02% of range
2	20Ω	1mΩ	5mA	8mA	± 0.03% of reading ± 0.02% of range
3	200Ω	10mΩ	500μΑ	1.8mA	± 0.03% of reading ± 0.02% of range
4	2kΩ	100mΩ	50μΑ	180μΑ	± 0.03% of reading ± 0.02% of range
5	20kΩ	1Ω	5μΑ	18μΑ	± 0.03% of reading ± 0.02% of range
6	200kΩ	10Ω	500nA	1.8μΑ	± 0.05% of reading ± 0.05% of range
7	2ΜΩ	100Ω	50nA	180nA	± 1% of reading ± 0.2% of range
8	20ΜΩ	1kΩ	5nA	18nA	± 2% of reading ± 0.2% of range

### **General Specifications**

4 1/2 digits OLED (19999) Display Type:

Overload Indication: O. L.

3 readings per second Conversion Rate:

Weight: Terminal Configuration: 4-Wire Kelvin

Current Source Compl. Voltage: Clamped at 1.6V

4 "D" Cell 1.2V rechargeable Power:

NiMH Batteries 10000mAh

9VDC at 300mA nominal Battery Charger:

±0.002% per °C Temperature Coefficient:

(from 0°C-15°C and 35°C-50°C)

0°C to 50°C Operating Temp. Range:

Storage Temp. Range: -10°C to 70°C

11.5" / 29.2cm Depth:

Width: 9.75" 24.8cm

3.5" / 8.9cm Height:

6.2 lbs / 2.8kg net

Accessories

Replacement Battery Charger/Power Supply

115V/230Vac to 9VDC @ 300mA

4 Heavy Duty rechargeable NiMH Replacement HDB

Batteries 1.2V 10000mAH.

**Options** 

The 4314Ki can be customized by removing the Custom

Serial Interface and/or the Continues Power

Mode feature.



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