# **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	180µA	± 0.03% of reading ± 0.02% of range
5	20kΩ	1Ω	5μΑ	18µA	± 0.03% of reading ± 0.02% of range
6	200kΩ	10Ω	500nA	1.8µA	± 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**

Display Type:	4 ½ digits OLED (19999)	Depth:	11.5″ / 29.2cm	
Overload Indication: Conversion	O. L.	Width:	9.75″ 24.8cm	
Rate:	3 readings per second	Height:	3.5″ / 8.9cm	
Terminal Configuration: Current	4-Wire Kelvin	Weight:	6.2 lbs / 2.8kg net	
Source Compl. Voltage:	Clamped at 1.6V	Accessories		
Power:	"D" Cell 4.8V rechargeable NiMH Battery Pack 10000mAh	Ai	Replacement Battery Charger/Power Supply 115V/230Vac to 5.9VDC @ 1.25A	
Battery Charger:	5.9VDC at 1.25A nominal	HDP	Heavy Duty rechargeable NiMH Replacement Battery Pack 4.8V 10000mAH.	
Temperature Coefficient:	±0.002% per °C (from 0°C-15°C and 35°C-50°C)	Options		
Operating Temp. Range: Storage	np. Range: Storage 0°C to 50°C		The 4314Ki can be customized by removing	
Temp. Range:	-10°C to 70°C	Custom	the Serial Interface and/or the Continues Power Mode feature.	



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