A NEW ERA OF PROTECTION

4314Mi Wide-Range, Ultra-Safe Digital Igniter Tester

Featuring the intrinsically-safe internal circuitry of our 4314 igniter tester *i*-series, the 4314M*i* adds an additional level of safety to the next generation of precision measurement instruments. Covering a wide 8-measurement range, the M*i* is an ideal fit for aerospace, defense, and manufacturing applications.

The 4314Mi 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.

Using a single connector on the front panel for measurements and charging, the 4314Mi prevents the possibility of having the charging adapter connected while using the instrument for measurements.

The 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. The user can fully operate the meter, query measurement, and configuration data via the interface.



Key Features

- Reduced Current (8mA Max)
- Wide Range 2Ω $20M\Omega$
- 0.1mΩ Resolution
- Rechargeable Battery-Operated NiMH 10AH
- 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

Depth: 11.5" / 29.2cm 4 ½ digits OLED (19999) Display Type: Width: 9.75" 24.8cm O. L. Overload Indication:

Height: 3.5" / 8.9cm 3 readings per second Conversion Rate: Weight: 6.2 lbs / 2.8kg net Terminal Configuration: 4-Wire Kelvin

Current Source Compl. Voltage: Clamped at 1.6V Accessories

"D" Cell Pack 4.8V 10000mAh NiMH Power: AF-A Replacement Battery Charger/Power Battery Charger:

4.9VDC at 1.25A nominal Supply 115V/230Vac to 5.9VDC @ 1.25A

HDP Heavy Duty rechargeable NiMH ±0.002% per °C Temperature Coefficient:

Replacement Battery Pack 4.8V 10000mAH.

(from 0°C-15°C and 35°C-50°C) **Options** Operating Temp. Range: 0°C to 50°C

Custom The 4314Mi can be customized by removing

Storage Temp. Range: -10°C to 70°C the Serial Interface.



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