VALHALLA
SCIENTIFIC

Digital Igniter Tester
4314 AF

4314AF introduces an added safety feature that prevents the possibility of having the charging adapter connected while using the instrument for measurements. A 6-pin Mil-Spec circular connector on the front panel of the 4314AF replaces the four-terminal banana jacks and the battery charger jack. Four of the front panel connector pins are used to mate with the measurement adapter cable and the other two pins are for the battery charging cable adapter. By using separate adapter cables for measurements and charging of the batteries, it ensures that the charge circuit cannot be activated at the same time as measurements are being made.

- Ultra Safe- Ultra Fail Safe
- Battery Powered Igniter Tester
- US Air Force Approved
- 4314AF Cannot Measure/Recharge Simultaneously
- Certified Mil Std 810 – Method 511 Safe for Explosive & Volatile Atmospheres
- Complies to (EWR) 127-1, Section 3.13.8.1-2
- 1milliohm Resolution to 20,000 Ohms
- Fail-Safe Current Limited
- Mil-Spec Front Panel Connector
- Now Available with RS-232 Interface

Description:

With the 4314AF Valhalla introduces an added safety feature that prevents the possibility of having the charging adapter connected while using the instrument for measurements.

A 6-pin Mil-Spec circular connector (MS3112E10-6S) on the front panel of the 4314AF replaces the four-terminal banana jacks used on the Alpha 4314 front panel and the battery charger jack on the Alpha 4314 rear panel. This is accomplished by the removal of the rear panel charger jack and including its connections to the instruments charging circuits through the 6-pin front panel connector. Four of the front panel connector pins are used to mate with the measurement adapter cable and the other two pins are for the battery charging cable adapter.

By using separate adapter cables for measurements and charging of the batteries, it ensures that the charge circuit can not be activated at the same time as measurements are being made.

Measurement Adapter Cable

The measurement adapter cable is a 3 feet long cable with a 6-Pin Mil-Spec circular connector, “MS3116F10-6P” at one end and a 4-Pin Mil-Spec circular connector at the other end. The cable configuration is two twisted pairs with an outer shield. The four wires are connected to four of the connector pins that mate with the front panel connector pins used for 4-wire measurements.

Battery Charging Cable

A standard 115VAC input wall adapter with an output of 6VDC at 300mA is used for charging the 4314AF batteries. The adapter has a 3 feet cable that the 6-Pin Mil-Spec connector has been attached to. Removing the measurement cable from the 4314AF and connecting the 6-Pin connector of the power adapter cable to the 4314AF front panel connector allows the batteries to be charged.

RS-232 Serial Interface Capability (NEW)

The interface is isolated to 2.5kV on both power and Data lines and uses iCoupler Technology. Option RS-232 provides a safe way to communicate with the Alpha 4314 via a computer or PLC and allows the transfer of single readings or continuous transmission of data. This interface is for data acquisition only and does not provide range control. See Datasheet for more details. Option RS-232 Data Sheet

Specifiacations:

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 300mA 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	9.5” / 24cm
Depth	11” / 27cm

Height	3” / 8cm
Weight	3 lbs / 1.3kg net; 6lbs / 3kg shipping

Rng #	Range	Resolution	Test Current	Failsafe Current	Accuracy
			STD	STD	
1	20Ω	1mΩ	10mA	16mA	± 0.03% of reading ± 0.02% of range
2	200Ω	10mΩ	1mA	1.8mA	± 0.03% of reading ± 0.02% of range
3	2kΩ	100mΩ	100µA	180µA	± 0.03% of reading ± 0.02% of range
4	20kΩ	1Ω	10µA	18µA	± 0.03% of reading ± 0.02% of range