

Aircraft Bonding Meter

I681B



Features

- o ATEX approved to Zone I
- o Intrinsically safe
- o Portable robust housing
- o Battery powered
- o Selection of bonding test leads



Description

The I681B Safety Ohm meter has been specifically configured to make Aircraft bonding measurements quickly and easily. The meter has a backlight LCD display that enables the user to work easily and quickly in shadow areas.

The recommended probe set comprises two 2m long pointed probe sets and two 2m long short pointed probes. These enable the user to quickly establish a connection on an aircraft area where a bonding measurement is required.

A carbon impregnated conductive foam case with a strap is supplied with the unit and measurements can be taken with the unit within and without of the case. Taking measurement with the I681B in the case, the entire unit can be grounded, by connecting the external ground lug on the case to the I681B chassis ground. This ensures that the I681B cannot generate an ESD "spark".



In areas where there is flammable gas present the I681B does not present a hazard since it is certified for use in an ATEX zone I environment. The rugged aluminium case has very low magnesium content and is proof against a number of liquid contaminants such as Aviation fuel, De icing fluid and Methanol.

Reliability and ruggedness of the I681B are well proven, since the I681 family of safety ohm meters are used by tri service military personnel. Similar units have been in service for over 20 years.

Electrical Specification	Details	Resolution
Range	000.0 to 199.9mΩ 0.000 to 1.999Ω 00.00 to 19.99Ω 000.0 to 199.9mΩ 0.000 to 1.999kΩ 00.00 to 19.99kΩ	0.1mΩ 0.001Ω 0.01Ω 0.1Ω 1.0Ω 10Ω
Measurement Accuracy	0 to 200Ω 0 to 2kΩ 0 to 20kΩ	±1% of reading ±1 digit ±1.5% of reading ±1 digit ±2.0% of reading ±3 digits
Applied Test Currents	0.000 to 199.9mΩ 0.000 to 1.999Ω 00.00 to 19.99Ω 000.0 to 199.9Ω 0.000 to 1.999kΩ 00.00 to 19.99kΩ	3.5mA rms 350μA rms 35μA rms 3.5μA rms 0.35μA rms 0.035μA rms
Measurement Frequency	10Hz	
Maximum Test Voltage	1V peak with test leads open circuit	

Physical Specification	Details
Physical Dimensions	190mm x 70mm x 200mm
Weight	2Kg (excluding case and leads)
Power	4 x AA batteries (Duracell MIN 1500)
Battery protection	Series diode to prevent incorrect battery polarity fit
Environmental	
Operating temperature	-20°C to +40°C
Storage temperature	-40°C to +60°C
Contaminants	Resistant to the following fluids Trichloroethane Avcat Cirgas Displacing fluid De icing fluid Isopropanol AL Methanol AL 14 Methylethylketone
EMC	DEF STAN 59-41 Part I Class A
Safety	⊕ II 2G Ex ib IIC T4 Gb (-20°C ≤ Ta ≤ +40°C)
Zero adjustment	Screwdriver slot in front panel



About AGI

AGI is backed by over 30 years of experience in the design, development, manufacture and installation of defence systems and provides full Integrated Logistic Support services, training, installation and documentation.

AGI is accredited to International Quality Standards ISO 9001/BSS750 Part I and Tick-IT software procedures.

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