

Automeg - P

Portable and Rugged
Automatic Electrical Harness Test System



“The full range of electrical harness tests available in a rugged portable format.”

Continuity test and resistance measurement

- Open Circuits
- High Resistance connections
- Incorrect Wire Gauge
- Bad crimps
- Corrosion and contamination
- Loose connections
- Dry joints
- Incorrect components fitted

Short circuit detection and measurement

- Short circuit miss-wire
- Damaged cables
- Corrosion and contaminant
- Low voltage isolation failures

Capacitance measurement

- Twisted pair
- Shielded cables
- Coax/triax cables
- Capacitors and components

High Voltage Insulation Test

- Insulation resistance measurement
- DC HiPot test
- Damaged or degraded insulation
- Faulty materials
- Under-rated materials

High Voltage HiPot test

- Leakage current measurement
- Flash test
- Dielectric breakdown test
- Damaged or degraded insulation
- Faulty materials
- Under-rated materials

Component Testing

Diodes / resistors / zenor diodes / transformers / inductors / fuses / breakers / sensors etc

Measurement is important in order to
is the diagnostic power of the MK Te
automatic test system a really power

Let the MK Automeg-P do the work.

Fault Diagnostic Capabilities

- What is the Nature of failure?
- Show me distance to fault
- Which wire is failing your HV tes
- Show me a picture of the failure
- Give me graphical instructions
- Shows the failures in red on the
- Displays the measurement chang
- Probe facility to allow me to faul



to pass or fail the test. It
test system that makes an
ful tool.

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location

report

ging in real time

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Features and Benefits

Rugged and portable for in-the-field testing

- Shock mounted relay boards & measurement modules
- Truly portable. One person carry.
- Wheels and pull-handle option
- Mains and battery powered options
- Weight <22kg
- Size 52cm x39cm x 230cm (other size as option)
- Robust Zero Insertion Force interface connectors
- Customer specific connectors as option
- Splash proof IP67 with lid closed for transportation
- Remote control via rugged tablet (option)

Automatic

- Integrated high performance computer
- MKAT Gen3 test management software
- On screen graphical operator guidance
- Optimised for touchscreen operation
- Multi language options
- User login and access control
- Measurement and UUT fault diagnostics
- Automatic report generation and results storage
- Upload results back to base option
- Wireless network capable option
- Remote control via rugged tablet (option)
- USB and LAN interface option
- Guarantees traceability by user, UUT, measured value

Reliable and accurate

- Integrated self-test and system monitoring
- Automatic calibration (using supplied calibration adaptor)

Model D1500 - Portable

PROVEN AUTOMATIC ELECTRICAL TESTING SOLUTIONS



ELECTRICAL PARAMETERS

Continuity

Current	0.1mA to 2000mA	Programmable in 0.01mA steps to 1mA, 1mA steps >1mA
Voltage Limit	1Vdc to 4Vdc	Programmable in 0.1V steps

High Voltage DC

Voltage	25Vdc to 1500Vdc	Programmable in 1V steps
Current	Up to 2mA	

TYPICAL TEST PERFORMANCE

Continuity	0.05s per established connection 0.05s shorts test per point
Insulation and Hi-Pot	Programmable Ramp, Pre Dwell and Measure Dwell Minimum 0.01s per point

MEASUREMENT

Continuity 4-Wire Mode	0.002Ω to 100kΩ	Accuracy 0.5% ±0.002Ω @ 1000mA	Resolution 0.001Ω
Continuity 2-Wire Mode	0.1Ω to 100kΩ	Accuracy 0.5% ±0.1Ω @ 1000mA	Resolution 0.1Ω
DC Insulation	5kΩ to 1000MΩ	Accuracy 5% ±0.5μA	

OPTIONAL MODULES

Capacitance & Inductance Module "LCR"	100pF to 10mF 0.01μH to 99,999H	Basic Accuracy 2% +/- 5pF (may be affected by external interface) Basic Accuracy 0.02%	
T&H - Temperature & Humidity Probe	1°C to 70°C 0% to 100% RH	Accuracy ±0.5°C Accuracy ±2% RH	Resolution 0.01°C Resolution 0.03%
External Excitation Modules (functional test switching)	EEMC5 (Changeover) EEMD12 (Dual Bus)	Max Current 5A Max Current 12A	Points per card 16 Points per card 64
Up to 1500V Isolation	Mswitch For Software controlled PSU options contact MK	Multibus architecture - See Model M1500	

SYSTEM OPTIONS

Continuity Current up to 2A, 5A or 10A
Continuity Range to 1MΩ
Insulation Resistance Range up to 5GΩ, 10GΩ or 50GΩ
Fixed or Floating Earth Options

INTERFACE

64 off 2-Wire test points per board (32 off in 4-Wire mode)
Maximum 512 Test Points per sub-rack
High specification ZIF Zero Insertion Force Connectors
For custom front end connector options contact MK

SUPPLY OPTIONS

230Vac 50/60Hz 1Ø
Battery Powered options

LAYOUT OPTIONS

Ruggedised Peli case for field deployment
Single Suitcase system
Distributed systems options

Under the MK Test Systems Continuous Improvement Programme, specifications are subject to change.

The D1500 range covers the vast majority of Aerospace and Defence test specifications offering field deployable, compliant test capability. For our wider range of automatic high voltage test systems contact the sales team at MK Test Systems.

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