

# Model F1500

PROVEN AUTOMATIC ELECTRICAL TESTING SOLUTIONS



## ELECTRICAL PARAMETERS

### Continuity

|               |                 |   |
|---------------|-----------------|---|
| Current       | 0.1mA to 1000mA | Programmable in 0.01mA steps to 1mA, 1mA steps >1mA |
| Voltage Limit | 1Vdc to 30Vdc   | Programmable in 0.1V steps                          |

### High Voltage DC

|         |                  |                          |
|---------|------------------|--------------------------|
| Voltage | 25Vdc to 1500Vdc | Programmable in 1V steps |
| Current | Up to 4mA        |                          |

### High Voltage AC

|           |                                 |                          |
|-----------|---------------------------------|--------------------------|
| Voltage   | 25Vrms to 1000Vrms              | Programmable in 1V steps |
| Current   | Up to 5mA                       |                          |
| Frequency | 50Hz fixed (see SYSTEM OPTIONS) |                          |

## TYPICAL TEST PERFORMANCE

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

## MEASUREMENT

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

## OPTIONAL MODULES

|  |                    |  |  |
|--|--------------------|--|--|
| AC1000 - AC Hi-Pot   | 1μA to 5000μA      | Accuracy 10% including parasitic current |  |
| CAP - Capacitance Module   | 0pF to 1000pF      | Basic Accuracy 5% ±5pF                   | Resolution 1pF                               |
|  | 1001pF to 3000pF   | Basic Accuracy 5% ±10pF                  | Resolution 10pF                              |
|  | 3nF to 300nF       | Basic Accuracy 5% ±2nF                   | Resolution 0.1nF                             |
|  | 0.3μF to 30μF      | Basic Accuracy 5% ±2μF                   | Resolution 1μF                               |
| Measurements include parasitic capacitance                                       |                    |  |  |
| Capacitance & Inductance Module "LCR"  | 100pF to 10mF      | Basic Accuracy 2% +/- 5pF                | <i>may be affected by external interface</i> |
|  | 0.01μH to 99,999H  | Basic Accuracy 0.02%                     |  |
| T&H - Temperature & Humidity Probe   | 1°C to 70°C        | Accuracy ±0.5°C                          | Resolution 0.01°C                            |
|  | 0% to 100% RH      | Accuracy ±2% RH                          | Resolution 0.03%                             |
| External Excitation Modules (functional test switching)<br>Up to 1500V Isolation | EEMC5 (Changeover) | Max Current 5A                           | Points per card 16                           |
|  | EEMD12 (Dual Bus)  | Max Current 12A                          | Points per card 64                           |
|  | Mswitch            | Multibus architecture - See Model M1500  |  |
| For Software controlled PSU options contact MK                                   |                    |  |  |

## SYSTEM OPTIONS

Continuity Current up to 2A, 5A or 10A  
Continuity Range to 1MΩ  
Insulation Resistance Range up to 5GΩ, 10GΩ or 50GΩ  
HVAC Frequency 60Hz fixed or up to 400Hz variable  
Fixed or Floating Earth Options.

## SUPPLY OPTIONS

115Vac 50/60Hz 1Ø  
230Vac 50/60Hz 1Ø  
415Vac 50/60Hz 3Ø

## INTERFACE

32 off 4-Wire test points per board.  
Maximum 512 Test Points per sub-rack.  
Connection via high specification 37 way D-type sockets  
Safety Interlock connection on front panel.  
For custom front end connector options contact MK

## LAYOUT OPTIONS

Standard 19" Rack Housing  
Static Desktop or Mobile Ruggedised Cabinet  
Single Station or Distributed Satellite Switching.

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

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