

MTL Data surge tester

Operating Instructions

DESCRIPTION

The MTL Data Surge Tester is a versatile and compact, bench-top test device designed to give performance status of data communication surge protectors for input-to-output continuity and leakage current.

This simple to operate surge tester gives a "GO" or "NO-GO" (pass or fail) status and is designed to test data communication surge protectors that have a nominal DC voltage rating of 7V, 16V, 32V and 55V.

NOTE:

- Qty.2 banana-plug test probes (red and black) are included with the tester
- Users will require a power cord fitted with an IEC C13 (female) type 3-pin receptacle and country-specific mains plug before commencing operation

OPERATION

Using the power inlet socket, connect the tester to an AC mains power supply in the range 90 to 264V AC.

Testing an MTL SD Modular module

Breakdown/Leakage test

Plug the module into the test receptacle, according to the 'Breakdown Test' orientation as indicated by the label on the tester.

Move the rotary switch to select the correct test voltage according to the table:

Rotary switch position	Module under test
7V	SD07M
16V	SD16M
32V	SD32M
55V	SD55M

Press and hold the "Breakdown Test" button. If the red "Fault if Lit" LED illuminates, the product has failed the test. If the red "Fault if Lit" LED does not illuminate, the product has passed the test.

Continuity test

Remove the module from the test receptacle and re-insert it according to the 'Continuity Test' orientation as indicated by the label on the tester.

Move the rotary switch to the "Continuity" position. Press and hold the "Continuity Test" button. Continuity is good if both "Line 1 OK" and "Line 2 OK" green LEDs are illuminated. If either LED does not illuminate, the product has failed.

Testing other surge module types using the test probes

Breakdown/Leakage test

Plug the red probe into the red receptacle and the black probe into the green receptacle. Connect the probes to the surge protector under test, either line to earth or line to line, whichever is applicable.

Move the rotary switch to the highest voltage setting below or equal to the nominal DC voltage rating of the surge protector under test.

Press the "Breakdown Test" button. If the red "Fault if Lit" LED illuminates, the product has failed the test. If the red "Fault if Lit" LED does not illuminate, the product has passed the test.

Continuity test

Plug the red probe into the red receptacle and the black probe into the black receptacle. Connect the probes between the protected and unprotected terminals of the surge protector under test. Polarity does not need to be observed.

Move the rotary switch to the "Continuity" position. Press the "Continuity Test" button. Only "Line 1 OK" LED will illuminate if continuity is good. The test may be repeated for each channel in the surge protector.