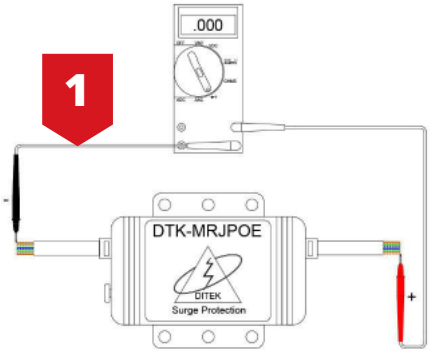
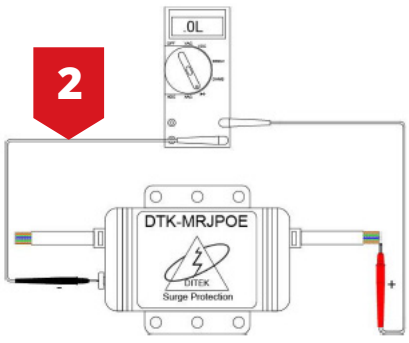
TECHNICAL WHITE PAPER

Field Testing: DTK-MRJ Series



The DTK-MRJ Series utilizes a multi-stage, hybrid circuit design that incorporates TVS diodes and gas discharge tubes to protect both common (L-G) and differential (L-L) modes. This device is passive to the circuit until there is a spike in voltage (transient surge), causing the protection component to react and dissipate the surge energy.





Test 1

Remove DITEK unit from the circuit; use an Ethernet cable cut back as shown.

Using a VOM Meter, test for continuity between:

- Pins 1- 8 unprotected (input) and protected (output) → short = pass

Results: If the surge energy exceeds the capacity of the device or the number of surge impulses is too great, the result will be an OPEN circuit from IN to OUT. This is the indication that the surge protector has gone end of life.

Test 2

Remove DITEK unit from the circuit; use an Ethernet cable cut back as shown.

Using a VOM Meter, test for continuity between:

- Pins 1-8 unprotected (input) and GND (ground) → open = pass

Results: If the surge energy exceeds the capacity of the device or the number of surge impulses is too great, the protection component will cause a short on either line to ground or line to line. This is the indication that the surge protector has gone end of life.

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DITEK® Surge Protection

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