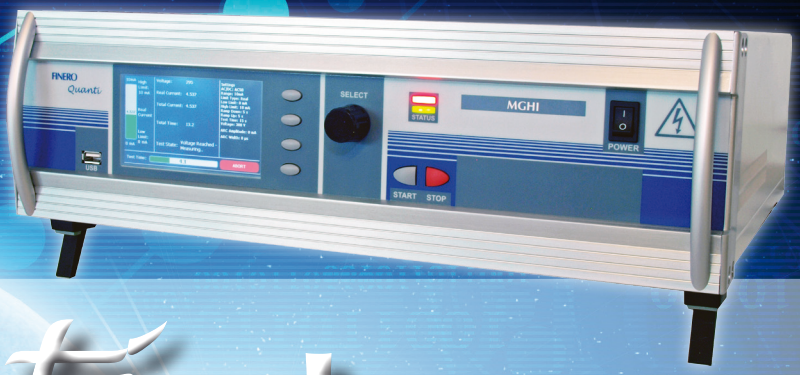
FINERO *The Quality Control Company*




# Quanti I

## INSULATION RESISTANCE

**Reliable, Rugged, Fast, Accurate, Intrinsically Safe & Easily Programmable Measurements**

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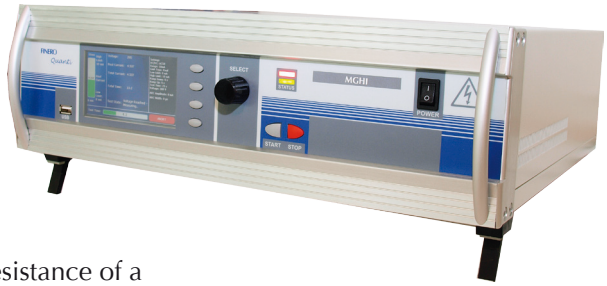
# INSULATION RESISTANCE - I




## WHY?

Insulation resistance test is one of the tests that are required by the electrical safety testing standards. The test measures insulation resistance of a Device Under Test, while phase and neutral are short circuited together.

| INSULATION RESISTANCE FUNCTION SPECIFICATIONS | | | | |
|---|---|---|---|---|
| OUTPUT VOLTAGE | Range: 50 - 1000V DC<br>Resolution: 1V<br>Accuracy: ± 0.5% of range | | | |
| RESISTANCE MEASUREMENT | Range: 0.5MΩ - 50 000MΩ (5 digit, Auto range)<br><br>Resolution: MΩ / MΩ<br>0.001 / 0.500 - 9.999<br>0.01 / 1.00 - 99.99<br>0.1 / 10.0 - 999.9<br>1 / 100 - 50 000<br><br>Accuracy: ± 5% to ± 15% depending upon the voltage and the selected range<br><br>50 - 499V DC:<br>0.5MΩ - 999.9MΩ, ± (5% of reading +2 counts)<br>1000MΩ - 9999MΩ, ± (8% of reading +2 counts)<br>10000MΩ - 50000MΩ, ± (17% of reading +2 counts)<br><br>500 - 1000V DC:<br>0.5MΩ - 999.9MΩ, ± (3% of reading +2 counts)<br>1000MΩ - 9999MΩ, ± (6% of reading +2 counts)<br>10000MΩ - 50000MΩ, ± (15% of reading +2 counts) | | | |
| RAMP TIME | Ramp up: 0.1 - 99.9sec; No Ramp<br>Ramp down: 0.1 - 99.9sec; No Ramp | | | |
| TEST TIME | 0; 0.3 - 999.9sec (0 = continuous) | | | |
| HI AND LO LIMIT (MΩ) | Range: 0.500 - 0.999<br>Resolution: 0.001 | Range: 1.00 - 9.99<br>Resolution: 0.01 | Range: 10.0 - 99.9<br>Resolution: 0.1 | Range: 100 - 50 000<br>Resolution: 1 |
| | Hi Limit: 0 = OFF | | | |

## ENSURING CONNECTIVITY

For optimum quality process control the connectivity to the DUT has to be ensured. Quanti gives the user several options to check this. The user can select either automatic or manual mode connectivity check. The parameters can be adjusted in order to meet high quality control standards and optimum yield.

## OUTPUT VOLTAGE 50 - 1000V DC

Quanti measures insulation resistance in electrical systems and equipment such as: electrical machines, household appliances, transformers, cables, power supplies and so on. Measuring range is from 0.5MΩ to 50GΩ.

## VOLTAGE RESOLUTION 1V

## VOLTAGE ACCURACY ±0.5% OF RANGE

## RESISTANCE MEASUREMENT ACCURACY ± 5% TO ± 15%

## RAMP TIMER

The voltage is ramped up from zero to the final value. Once the voltage reaches the selected value, it is kept at that value for a brief period (typically up to 5 seconds) before the resistance value is measured.