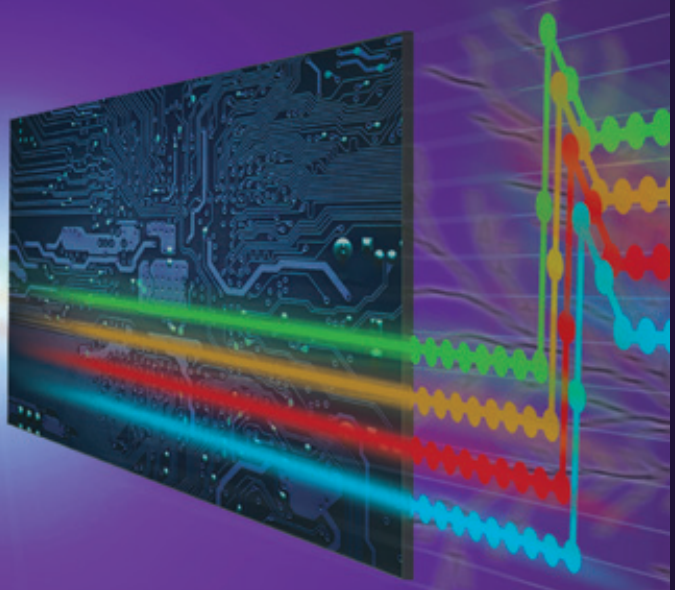
Introducing the new AutoSIR System from Gen3 Systems

Measuring changes in Surface Insulation Resistance



GEN3 SYSTEMS

# AutoSIR2

Surface Insulation Resistance Testing System

## Features:

**Measurement Time:**
256 Channels <8 seconds

**Applied Voltage:**
+1V to 1000V

**Measurement Range:**
$10^6$ Ω to $10^{14}$ Ω

**Measurement Method:**
Continuous on all selected channels

**Measurement Test Intervals:**
Fully Selectable from minimum of 1 minute

# SIR Testing


Measurements may be taken at test intervals that are fully selectable from a minimum of 1 minute. Each channel is current limited (1 MΩ), ensuring that Electro-Chemical Reactions (Dendrites) are preserved for subsequent failure analysis. The frequent monitoring capability provides a full picture of the electro-chemical reactions taking place on a circuit assembly, and provides early trend analysis enabling tests to be curtailed, thus saving considerable test time and money.

The design of the data acquisition cards minimises channel-to-channel leakage. This is important because, the extremely low levels of current involved in SIR measurement means, any stray currents (including electromagnetic noise or leakage between wire insulations) can significantly affect measurement accuracy.

Independent temperature-humidity monitoring records the environmental conditions next to the coupon under test, as the data is gathered, for more accurate data analysis.

# The NEW AutoSIR Measurement System

Truly continuous monitoring and measurement.

When the measurement and test bias are the same, no switching takes place as the voltages are continuously applied.

A measurement range of $10^6$ to $10^{14}$ Ω remains at the heart of the system.

Measurements from all 256 channels can be taken in <8 seconds.

Capable of testing to all existing test specifications IPC - IEC - JNC and other user specifications.

Future-proofed design.

Adaptable and flexible software operating with Windows® 7 and 8.

AutoSIR 2 is available with 64, 128 or 256 channel configurations.

On connection the system runs a self test.

Assuming a 256 channel instrument:

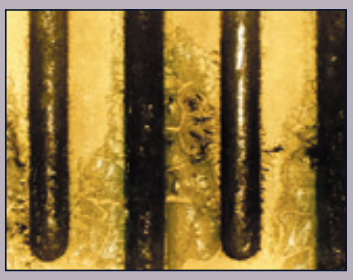
| TEST COUPON | No. of Test Points | Max No. of Coupons per Test |
|---|---|---|
| IPC B24 | 4 | 64 |
| IPC B25 (Bellcore "W" pattern) | 15 | 26 |
| IPC B25A | 8 | 32 |
| IPC B52 / IEC TB57 | 16 | 16 |
| NEW IPC B53/IEC B53 | 4 | 64 |

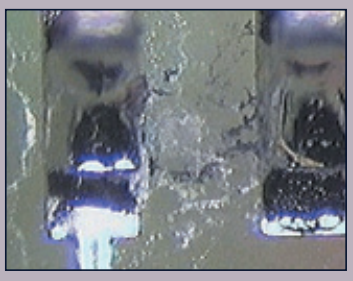
## GEN3 Systems - Setting the Standard

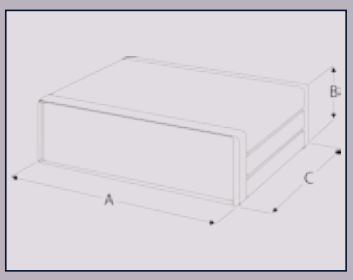

*AutoSIR 2 with optional test rack and computer*

# Specifications

| | |
|---|---|
| Number of Channels | 64 or 128 or 256 |
| Measurable range of insulation resistance | $10^6$ to $10^{14}\Omega$ |
| Internal Bias Voltage | 0V; 3.3V; 5V; 10V; ±50V & ±100V |
| External Bias Voltage | 1V to 1000V |
| Measurement Method | Continuous on all selected channels |
| Measurement Test Intervals | Fully selectable from minimum of 1 Minute |
| Measurement Time | 256 channels <8 seconds |
| Maximum Test Duration | Unlimited |
| Current measuring cable | Fully shielded |
| System status LED'S | Power<br>Communications<br>Low resistance<br>Temperature and humidity<br>Bias Voltage Out of Range / Failure |
| Data collection | Sampling Time, Elapsed Time, Resistance, Current, Applied Voltage, Temperature, Humidity |
| Applicable OS | Windows® 7 & 8 |
| Power requirement | 110V / 230V Switchable mains single phase |
| Dimensions | [A] 515mm (20½")<br>[B] 170mm (6½")<br>[C] 390mm (15") |
| Weight | 10.5 kgs (371 lbs) |








GEN3 SYSTEMS

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