

## SIR TESTER

### Measuring system for determining the surface insulation resistance on PCB's

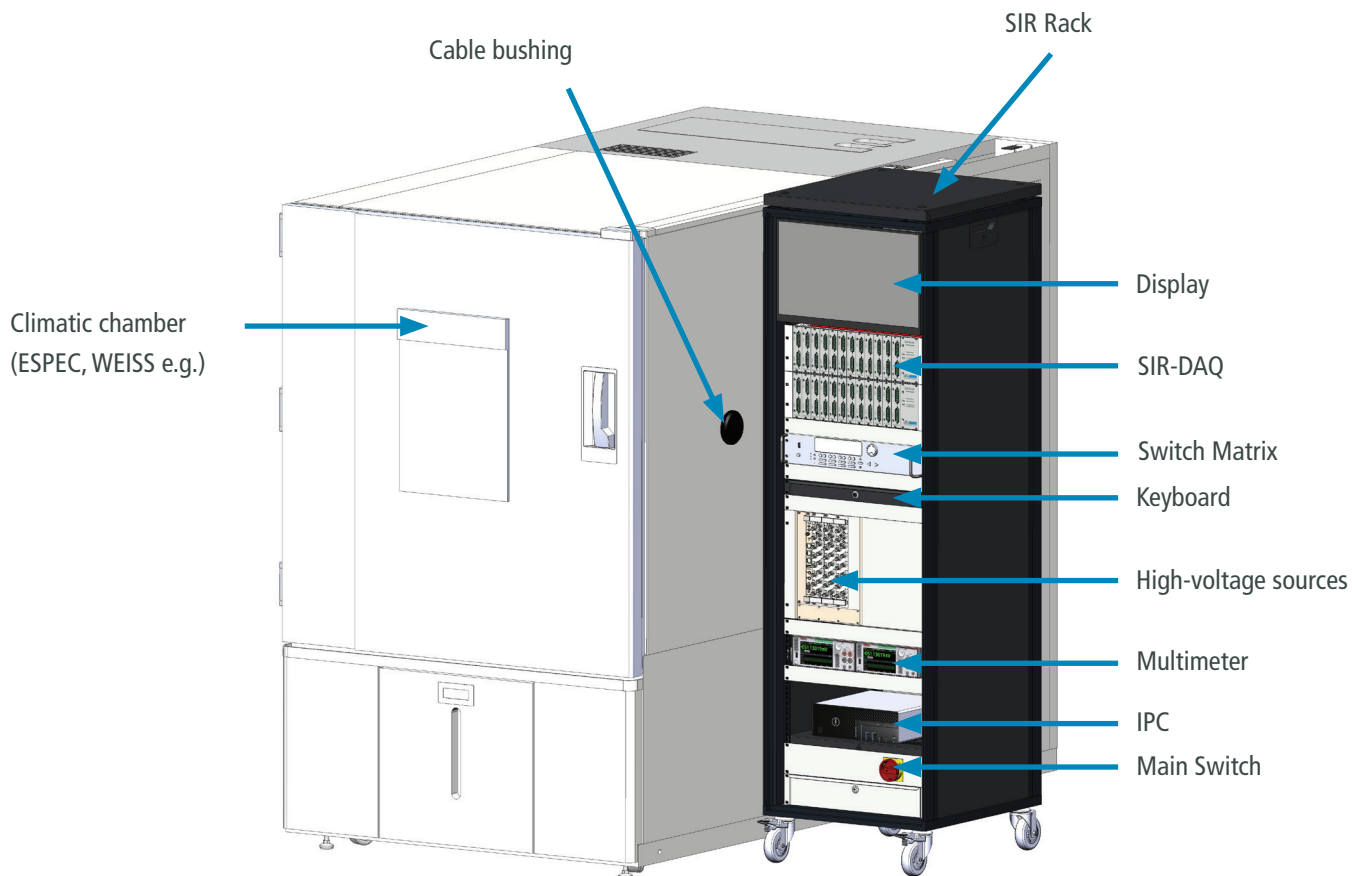
#### FEATURES & BENEFITS

- Modular system design
- Up to 240 measurement channels
- ATV own coupon holder design for high voltage applications
- Different coupon holder designs (B24, B52, custom)
- Up to 15 unidirektional 0...2kV bias voltage sources
- Up to 3 bidirectional -200...+200V bias voltage sources
- High Voltage / Low voltage safety switch functionality

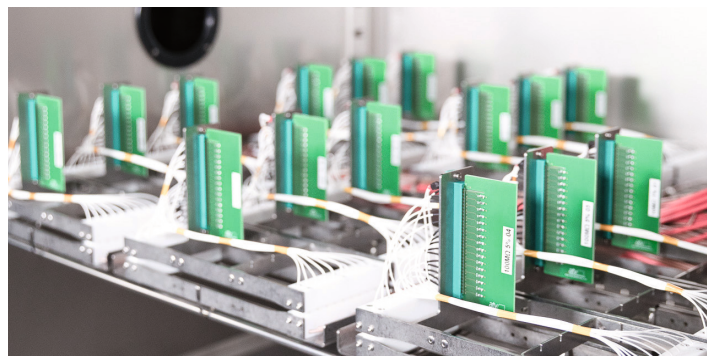


The SIR tester is used for long-term measurement of surface resistances on PCBs under various different climatic conditions. During this long-term measurement, an adjustable bias voltage is applied to the DUTs (Device under Test). In an adjustable measuring interval, all measuring channels are measured sequentially and stored as a data set.

## System overview



## Coupon Mainboard

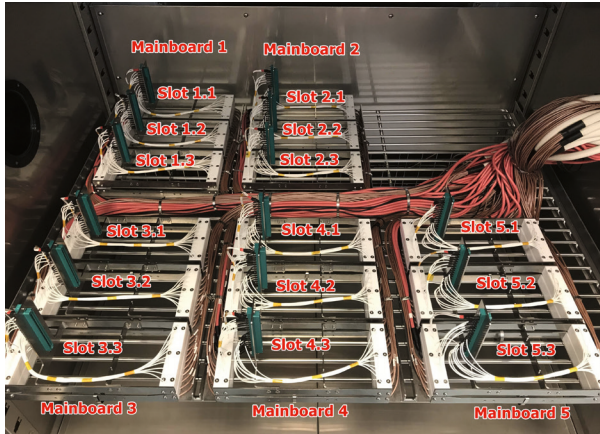


Module	Full SIR Tester	Mini-SIR	Modular Unit (upgrades)
Low current measurement input channels	240	40	40
Measurement signal multiplexer	6x40	1x40	1x40
High voltage source	48 x 1,5kV	No high voltage	16x 500 V / 1 kV / 1,5 kV
Low voltage source	1x ± 200V	1x ± 200V	
Chamber mainboards	5 (à 3 Slots)	1 (à 3 Slots)	5 (à 3 Slots)

# Technical data

## Slot system

Signal	Quantity
Source 1	1x
Source 2	1x
Source 3	1x
GND	1x
Input	16x



## Electrical specification

Low leakage, high voltage measurement inputs	
Input voltage	-200...2000 V
Input current	max. 2mA
input protection	1M $\Omega$
measurement capability	10 <sup>6</sup> to 10 <sup>15</sup> Ohms
all max 240 channels captured within 10s	

## General Data

climatic stress temperature during operation:	-60...120°C
Full stainless steel / PTFE system design to avoid system contamination / oxidation compatibility with different climatic chamber suppliers (ESPEC, WEISS e.g.)	
Dimensions	(WxHxD): 600 x 1950 x 600 mm
Weight: Approx.	120 kg