

Rigel 288

Electrical Medical Safety Analyser

The Rigel 288 is the smallest and lightest comprehensive electrical safety analyser on the market. Multiple tests in super fast time.



Standards & Tests

- Leakage current to IEC 60601-1, IEC 62353, EN 62353 /08. 2008), (substitute for VDE 0751), AAMI, NFPA and many more
- Direct, differential and alternativ leakage
- IEC 60601 and AAMI test loads/body model
- Earth continuity test using high current test capacity
- Insulation resistance measurements
- Up to 10 individual patient connecuions
- IEC power cord test (continuity, insulation, polarity)
- Store up to 10.000 test redords

Using purpose designed robust enclosure, the Rigel 288 is truly hand-held, enabling one hand operation and navigation.

Specifications*

Earth Continuity

Method	2 wire technique, using 'zero' lead function.
Test Current	>+200 mA, -200 mA DC into 2 ohms
Max Test Voltage	4-24 V rms o/c (6V for IEC 60601 tests)
Measuring Range (low range)	0.001 – 0.999 ohms @ 0.001 ohms resolution
Measuring Range (mid range)	1.00 – 9.99 ohms /@ 0.01 ohms resolution
Measuring Range (high range)	10.0 – 19.9 ohms @ 0.1 ohms resolution
Accuracy	± 3 % of reading + 10 m ohms

Insulation Resistance

Measurement	EUT to Earth / Ground, EUT to AP, AP to Ground
Voltage	250 V DC, 500 V DC @ 1 mA.
Range (low range)	0.01 Mohms - 20 Mohms
Accuracy (low range)	± 5 % of reading +2 counts
Range (high range)	20 Mohms – 100 Mohms
Accuracy (high range)	±10 % +2 counts
Resolution	0.01 Mohms

Direct Leakage Measurement

Measuring Range	4 µA to 9999 µA
Accuracy	± 5 % or reading +2 counts
Mains on A.P. voltage	F-type only @ 110 % of mains
Measuring Device	As per IEC 60601-1 requirements
Measurement Type	Separate AC & DC for Patient (-Auxiliary) Leakage to IEC 60601 True RMS for all remaining Leakage tests

Differential Leakage Measurement

Measuring Range	75 µA to 9999 µA
Accuracy	±5 % of reading + 5 counts
Measurement / display resolution	1 µA
Measurement Type	True RMS
Measuring Device	Similar frequency response characteristics to IEC 60601-1.

Alternative Leakage Measurements:

Test Voltage	250 V at mains frequency
Test Current	3.5 mA current limited
Measurement Range	4 µA to 9999 µA
Measurement Resolution	1 µA
Measurement Accuracy	±5 % of reading + 2 counts
Measurement Type	True RMS
Measuring Device	As per IEC 60601-1

Power Measurement

Method	VA rating.
Range	0.1 KVA – 4 KVA
Accuracy	±10 % + 2 counts

Mains Outlet Test

Input voltage range:	0-300 V AC, max current 16 A
Measures	L – E, N – E & L – N
Accuracy	± 5 % of reading + 2 counts

IEC Mains Lead Test

Test Duration:	2 s
Test:	Continuity of all conductors, Earth bond, Insulation & Polarity

General

Mains power	230 V-AC ±10 %, 50 Hz +/- 1 Hz
Battery	6 x 1.5 V Alkaline AA
Weights	1.6 kg including batteries
Size (L x W x D)	270 x 110 x 75 mm / 10.5 x 4 x 3"
Operating conditions	0' - 40'C, 0-90 % RH - NC
Storage environment	-15' - +60'C
Environmental Protection	IP 40

*Specifications are subject to change without notice