

Multifunction Meter

The product should have,

- Inbuilt-Single phase power quality analyser
- Recording should be in accordance with the class-S of EN 61000-4-30
- Voltage ranges up to 500 V, with 0.1 V resolution & $\pm 2\%$ accuracy.
- Current measurement up to 3000A the resolution and accuracy is dependent on the clamps used.
- Measurement of Frequency in the range of 45 Hz – 65 Hz
- Measurement of Active (P), Reactive (Q) and Apparent (S) Power
- Measurement of Power factor (PF), $\cos\phi$,
- Measurement of Harmonics (up to 40th for voltage and current),
- Measurement of Total harmonic distortion (THD) for current and voltage
- Short circuit loop impedance test (Z_{L-PE} , Z_{L-N} , Z_{L-L}) from 0.13 Ω ...1999.9 Ω according to IEC 61557
- Short circuit loop impedance test without RCD tripping (Z_{L-PE}) from 0.50 Ω ...1999.9 Ω according to IEC 61557.
- RCD tripping time test for general and short-time delay RCD up to 300 ms with the resolution of 1ms
- RCD tripping time test for selective RCD up to 500 ms with the resolution of 1ms
- Measurement of RCD tripping current test up to 1000 mA.
- Earth resistance measurement
 - 1) 2- Pole method (up to 0.00 Ω ...99.9 k Ω)
 - 2) 3-Pole method (0.50 Ω ...1.99 k Ω with the accuracy of from $\pm (2\% \text{ m.v.} + 3 \text{ digits})$)
 - 3) 4-Pole method (0.50 Ω ...1.99 k Ω with the accuracy of from $\pm (2\% \text{ m.v.} + 3 \text{ digits})$)
 - 4) **3Pole + Clamp method to measure the individual earth pit resistance without disconnection from the grid (0.00 Ω ...1.99 k Ω with the accuracy of from $\pm (8\% \text{ m.v.} + 3 \text{ digits})$)**
 - 5) Soil resistivity measurement up to 0.0 $\Omega \text{ m}$...99.9 k $\Omega \text{ m}$
- Insulation resistance measurement with 50V, 100V, 250V, 500V, & 1000V up to 9.99 G Ω with the accuracy of $\pm 3\%$
- Resistance of protective conductors and equipotential bondings
 - 1) Measurement of resistance of protective conductors and equipotential bondings with $\pm 200 \text{ mA}$ current from 0.12 Ω ...400 Ω acc. to IEC 61557-4 with the accuracy of $\pm 2\%$
 - 2) Measurement of resistance with low current from 0.0 Ω ...1999 Ω with the accuracy of $\pm 3\%$
- Phase sequence indication- in the same direction (correct), opposite direction (incorrect), UL-L voltage: 95 V...500 V (45 Hz...65 Hz)
- Light intensity measurement from 0 lx to 399.9 klx with the accuracy of $\pm 2\%$
- Safety standard in accordance with the EN 61326-1 & EN 61326-2-2
- Memory of measurement results are unlimited – 4GB memory
- CAT IV 300V (III 600V)
- Battery chemistry should be Ni-MH with 4.8V 4.2AH
- Software for report generation.

- Interface USB & Bluetooth
- Memory up to 990 results
- Ingress protection: IP54
- Quality standard: ISO 9001
- Weight should not more 3 kg
- Operating temperature 0 to 50°C