Multifunction Meter

The product should have,

- 7- Inch Touch screen
- Removable microSD memory card
- Inbuilt-Three phase power quality analyser
- Recording should be in accordance with the class-S of EN 61000-4-30
- Voltage L1, L2, L3, average values in the range up to 500 V, » L1, L2, L3 currents, average values, current measurement in the range up to 3 kA (depending on the current probes used)
- Measurement of Frequency in the range of 40 Hz 70 Hz
- Measurement of Active (P), Reactive (Q) and Apparent (S) Power
- Measurement of Power factor (PF), cosφ,
- 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 $0.00 \Omega...99.9 k\Omega$)
 - 2) 3-Pole method (0.50 Ω ...1.99 k Ω with the accuracy of from ± (2% m.v. + 3 digits)
 - 3) 4-Pole method (0.50 Ω ...1.99 k Ω with the accuracy of from ± (2% m.v. + 3 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 ± (2% m.v. + 3 digits)
 - 5) Soil resistivity measurement up to 0.0 Ω m...99.9 k Ω 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 ± 200 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 ±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 ±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 500V)

- Battery chemistry should be Li-ion with 11V 3.4AH
- Software for report generation.
- Interface USB, Wi-Fi, Bluetooth
- Ingress protection: IP51
- Quality standard: ISO 9001
- Weight should not more 3 kg
- Operating temperature 0 to 45°C