Scope of the Product

The instrument is intended for quick and accurate measurement of AC current, AC/DC voltage, resistance, capacitance, and low-impedance voltage. Its open jaw design makes it ideal for use in narrow switchboards or hard-to-access areas, ensuring fast and safe electrical diagnostics in various industrial and commercial applications.

Technical Locking Specification for Fork-Type Clamp Meter

1. **The instrument should have** an open-jaw clamp design to enable quick, non-contact current measurements in tight spaces.
2. **Instrument should have** a clamp opening of 16 mm (0.6") suitable for standard conductor sizes.
3. **Instrument should have** the capability to measure AC current up to 200 A with a resolution of 0.1 A and an accuracy of ±(3% of reading + 5 digits).
4. **Instrument should have** the ability to measure AC voltage up to 1000 V with a resolution from 0.001 V and accuracy of ±(1.2% of reading + 2 digits).
5. **Instrument should have** the ability to measure DC voltage up to 1000 V with a resolution from 0.001 V and accuracy of ±(0.9% of reading + 4 digits).
6. **Instrument should have** Low Z (low impedance) voltage measurement capability up to 600 V, with high accuracy for ghost voltage elimination.
7. **Instrument should have** resistance measurement capability up to 60 MΩ, with a minimum resolution of 0.1 Ω and an accuracy of ±(1.0% of reading + 4 digits).
8. **Instrument should have** capacitance measurement capability up to 4000 µF, with resolution from 0.01 nF and accuracy of ±(3.0% of reading + 5 digits).
9. **Instrument should have** True RMS (TRMS) measurement functionality for accurate readings on non-sinusoidal waveforms.
10. **Instrument should have** MIN/MAX measurement capture and data hold function.
11. **Instrument should have** automatic range selection for ease of use.
12. **Instrument should have** a 4-digit segmental LCD display with manual backlight for visibility in all lighting conditions.
13. **Instrument should have** a built-in flashlight and acoustic beeper for enhanced usability.
14. **Instrument should have** an ingress protection rating of at least IP40.
15. **Instrument should have** safety compliance in accordance with EN 61010 standards:

- CAT IV 600 V
- CAT III 1000 V

18. **Instrument should have** an operating temperature range from 5°C to 40°C and a storage temperature range from -20°C to +60°C.

19. **Instrument should have** compact dimensions approximately 230 mm × 44 mm × 66 mm and weight not exceeding 270 g.
20. **Instrument should have** standard accessories including test leads and basic case; optional accessories should include line splitter, crocodile clips, pin probes, and calibration certificate with accreditation.
21. **Instrument should have** compliance with the requirements of the following standards:

- EN 61010-1
- EN 61010-2-032
- EN 61010-2-033
- EN 61326

22. **Instrument should have** certification as per ISO 9001 quality standard.
23. Bidder will have to submit the documentary evidence of having established mechanism for prompt services as & when required.