

TESTING & CALIBRATION SERVICES

For On Site Calibration of HT & LT 3Ø CT based Energy Meters, Electrical Meters, CTs & Power Quality Analysis

Dew Energy has unique facility for onsite Calibration of HT & LT 3Ø Energy & other Electrical meters, without disconnecting the wires by high quality PWS 3.3 portable Working Standard & Power analyser. PWS 3.3 is a high accuracy instrument of 0.05 class accuracy of 'MTE Meter Test Equipment, Germany'.

The following Electrical parameters can be checked on-line:

- Active Energy (Kwh), Reactive Energy (Kvarh) & Apparent Energy(Kvah)
- Current, Voltage, Power factor & Frequency
- Kw, Kva & Kvar
- Harmonics (THD & upto 65th Harmonic of current, voltage, Active, Reactive & Apparent energy)
- Power Quality analysis (Dips, Swells, Interruptions, Harmonics, Interharmonics, Signal voltages, Voltage unbalance, Flicker, Transient capture $\geq 200\mu\text{s}$ (10 kHz))
- Instrument transformer testing (CT/PT burden, CT ratio & Phase angle error)

Details of Three-phase Portable Working Standard and Power Quality Analyzer



PWS 3.3 is a combination of a three-phase Portable Working Standard of class 0.05% and an IEC 61000-4-30 Class A compatible Power Quality Analyzer with 3 voltage and 4 current channels. The Working Standard is used to test single and three phase meters, instrument transformers and installations on site.

The Power Quality Analyzer is used to resolve disputes at contractual applications, for statistical surveys, including EN 50160 reporting, and for online troubleshooting of different kind of power quality problems.

The unit can be used with various types of clamp-on CTs and current sensors. Therefore it is possible to easily and accurately test both CT and direct connected meters.

WORKING STANDARD - Functions

- Meter testing of pulse outputs (LED/disc mark/S0) and registers of active, reactive, apparent 1- or 3-phase, 3- or 4-wire energy meters with 2 pulse inputs (1 configurable as pulse output).
- Measurement of electrical parameters (UI ϕ , PQS, f, PF) including vector diagram, harmonic analysis and wave form display.
- Instrument transformer testing (CT/PT burden, CT ratio, Phase angle error)

POWER QUALITY ANALYZER - Functions

- Dips / Swells / Interruptions
- Harmonics / Interharmonics / Signal voltages
- Voltage unbalance
- Flicker
- Transient capture $\geq 200\mu\text{s}$ (10 kHz)