

590K CVT Error Tester

World Class

Red Phase Instruments 590K is the culmination of 4 years of research and development. It has the ability to characterize most Capacitor Voltage Transformers to a ratio accuracy of 0.05% which is unsurpassed at the portable level, with the closest accurate testing alternative only available through traditional and expensive High Power application methods.

A world class instrument, the 590K employs a digital signal processor to perform sophisticated modeling and also maintains an empirical database of almost 60 fully characterized CVTs from 12 manufacturers.

With an ability to measure for accuracies at different primary ratings under various burden and power factor conditions, the 590K is able to characterize CVTs at standard and customized test points to 0.2 Class accuracy.

It may be optionally accessorized with an electromagnetic shield for onsite testing of out for service CVTs in live substations.



Capabilities

- CVT ratio & phase error
- CVT Core Admittance at 50 / 60Hz
- CVT input impedance
- CVT DC Winding resistance
- C1 and C2 Calculation
- Burden Test

Features

- Suitable for CVTs with compensation reactor termination at high or low end of intermediate transformer
- Suitable for CVTs with 1, 2 or 3 secondary terminals
- Suitable for CVTs with primary input up to 550kV
- Suitable for CVTs with a secondary output from 57V to 240V.
- Accuracy class: 0.2% 0.5% 1.00% 3.0% 3P 6P
- Ratio error measurement accuracy of 0.05%
- Phase error measurement accuracy of 5 min
- Winding resistance accuracy at: 10mΩ +/- 0.5%
- External burden accuracy of: 0.2Ω +/- 0.5%
- Checks for compliance with IEEE C57.13 and IEC 60044
- 4 pre-recorded test point sets
- Large easy to read colour display
- Up to 2GByte record storage
- Downloadable records via USB
- Window XP user interface
- Ruggedized Pelican case
- Portable and light weight
- Size: 740 x 510 x 350mm

Requirements

- 85 to 264 Volts AC @ 50 or 60Hz
- Standby Pwr Consumption: 10VA
- Pwr Consumption in test: 100VA

Accessories

- 12m P1, 8m P2 Primary and 8m Secondary cable