

IEC Compliance Test Systems

1250-15000VA Programmable AC & DC Immunity Compliance Testing

150–300 V

0–37 A

- **Complete Test Solutions**

Complete test solutions for emissions and immunity compliance testing of AC and DC powered products

- **Single & Three Phase Operation**

Offers flexibility

- **Direct PC Bus Access**

Provides high sampling rate and resolution for accurate measurements and high speed data transfers

- **PC based harmonic & flicker testing**

provides real-time full color data display updates and continuous PASS/FAIL monitoring.

- **Supports Global Standards**

Supports European and Japanese standards

- **Easy To Use Interface**

Provides IEC test setup, data analysis, display, MS Word test reports, and data files are generated in MS Excel format

- **High resolution**

Data storage to disk in for post-acquisition analysis and reporting

- **Single Step**

Single Step and Fast Forward replay of recorded test data



Covered EN IEC Standards

The following tests can be performed using an iX Series based CTS system:

EN 61000-3-2	Harmonics
EN 61000-3-3	Flicker
EN 61000-4-11	Voltage Dips and Interruptions (EOS Option)
EN 61000-4-13	Harmonics and Inter-harmonics (requires option -413)
EN 6100-4-17	DC Ripple
EN 61000-4-14	Voltage Fluctuations
EN 61000-4-28	Frequency Variations
EN 61000-4-29	DC Dips and Interruptions (Pre-compliance)

EN 61000-3-2 Harmonics

Full compliance testing for current harmonics emissions of class A, B, C and D products is supported. Support for both the 1998 and 2001 version (Amendment 14) of the Harmonics standard is built-in for full compliance with both harmonics standards.

EN 61000-3-3 Flicker

Flicker PST & PLT results are displayed in real-time during the entire test. No need to wait until the entire test is completed to know if the EUT passed or failed. Both programmable and lumped reference impedance methods are available for flicker testing.

EN 61000-4-11 Voltage Dips

Pre-compliance Voltage Dips and Interruptions are available on most CTS systems. For full compliance solutions, the Electronic Output Switch (option -EOS1 or -EOS3) may be added to iX based CTS systems.

Integrated System

The CTS Series is a complete, turn-key compliance test system for EN IEC 1000-3-2 (Harmonics), EN IEC 1000-3-3 (Flicker) and various EN IEC 1000-4 AC immunity tests. Consisting of an AC power source, a power analysis conditioning system unit (PACS) and a PC based data acquisition system, the CTS provides a complete turn-key solution for IEC testing. The Windows™ based CTS software performs all required IEC tests and generates detailed test reports. Comprehensive data files are stored on disk to allow post test analysis.

The CTS system implements various IEC standards including the new Amendment 14 and provides a software only upgrade path for future standard changes.

A European style AC outlet is provided on the front panel or rear panel for easy connection of single phase loads. Three phase loads are connected using rear terminal blocks.

AMETEK

Programmable Power

9250 Brown Deer Road
San Diego, CA 92121-2267
USA

AMETEK®
PROGRAMMABLE POWER

CTS Series

EN 61000-4-13 Interharmonics

Testing to the EN 61000-4-13 Interharmonics standard is supported on all iX Series based CTS systems by adding the -413 option.

Other EN 61000-4 Immunity Tests

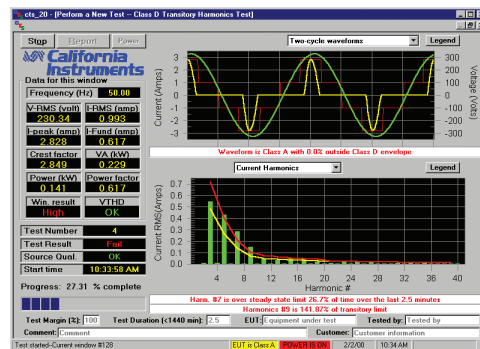
Additional immunity test standards are supported on all iX based CTS Systems.

Configurations

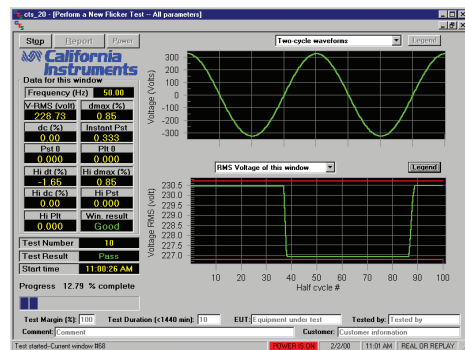
The CTS system is available in both single phase and three phase configurations. Single phase configurations range in power from 1250 VA to 5000 VA.

Three phase configurations offer 15 k VA or 18.5 A per phase at 230 V. Single phase 5001iX-CTS systems can be upgraded to three phase systems if needed.

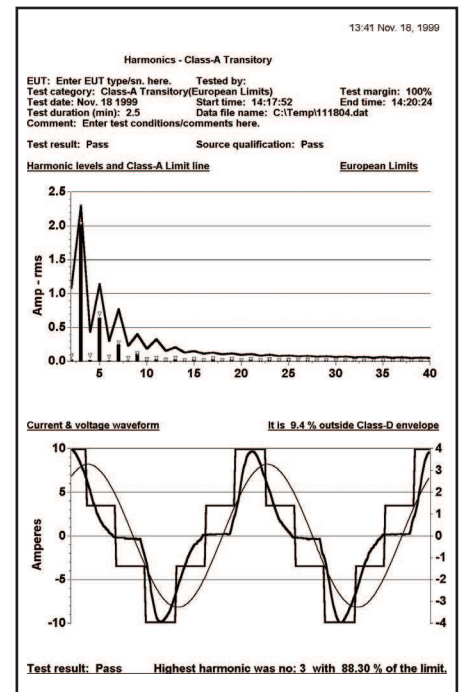
Measurement only CTS system versions (100-CTS and 300-CTS) can be added to an existing California Instruments power source.



Current Harmonics test display



Real-time Flicker test display



Detailed Test Reports and Data

CENELEC - Amendment 14

The CTS, with its flexible architecture, allows the user to select measurements to be made per the recently harmonized amendment.



Model 15003iX-CTS 15 kVA three phase test system shown in optional Cabinet

Model	Output Power	Source Model	No of Phases	EN61000-3 Test	EN61000-4 Test
100-CTS		n/a	1	✓	
300-CTS		n/a	3	✓	
1251RP-CTS	1250 VA	1251RP	1	✓	
3001iX-CTS	3000 VA	3001iX	1	✓	✓
5001iX-CTS	5000 VA	5001iX	1	✓	✓
15003iX-CTS	15000 VA	15003iX	3	✓	✓