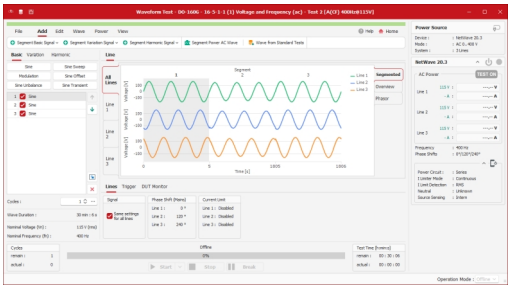
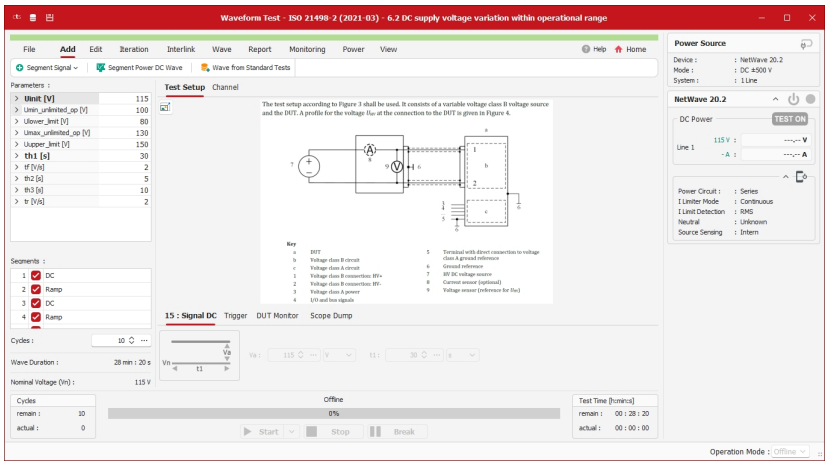


CTS Automotive High Voltage
Compliance Test Studio

Compliance Test Studio for high voltage automotive testing simplifies EMC and robustness tests on high voltage automotive component and electrical sub-assemblies (ESA). It gets the most out of AMETEK CTS high voltage and ripple test generators. The extensive standards library includes pre-programmed tests which makes you focus on testing and not programming. It is the ideal tool for compliance testing as well as tests part of the product development or validation process.

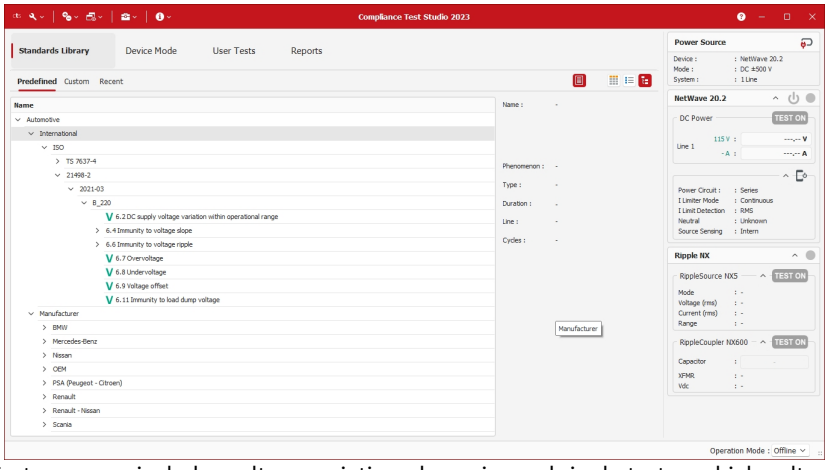
MAIN FEATURES

- **Automotive high voltage standards testing**
- **ISO 21498, ISO 7637-4, ECE-R10**
- **LV123, VW 80300, GS 95023, MBN 11123 any many more**
- **Large library with pre-programmed tests**
- **Easy generation of comprehensive test reports**
- **Integration of external instruments**



Efficient testing with Standards Library

The extensive library includes pre-programmed tests of international and manufacturer standards.

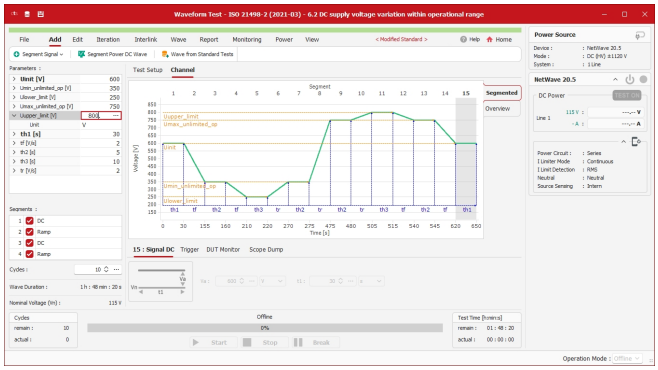


Test coverage includes voltage variation, dynamics and ripple tests on high voltage EV components according to ISO 21498-2, ISO TS7637-4, LV123, VW 80300, MBN 11123, GS95023 and many more. It covers AC immunity tests on supply lines of charging stations according to IEC 61851-2-x, SAE J 2894-2, etc.

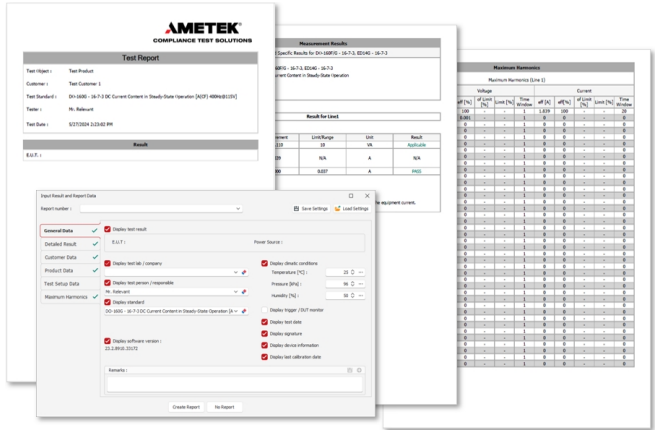
AMETEK CTS experts actively follow and participate in international standardization work. This ensures that always the latest changes are implemented and newest versions of standards are available. Updates are regularly released to keep track with changes in standards, methods or test conditions.

Specifications subject to change without notice, AMETEK CTS is an ISO accredited company. Products are designed and manufactured under strict quality and environmental requirements of ISO 9001

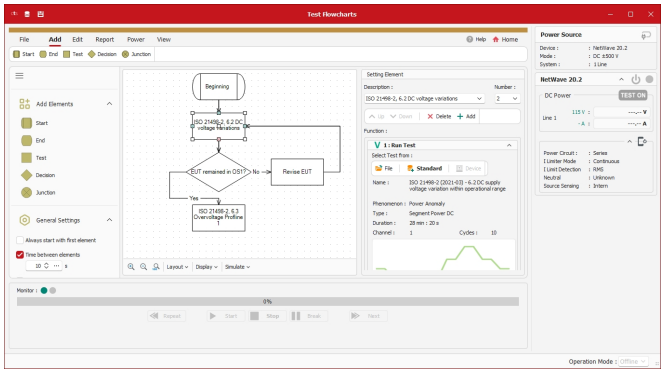
Main Features and Functions



The Waveform Editor allows easy programming of AC and DC voltage variations. Use the pre-programmed waveforms from the Standards Library, customize it to your needs or program a custom waveform based on the available segments (ramps, transitions, distortion, sweeps etc.). The waveform is changed by modifying the segment parameters which are documented in the integrated help.
Arbitrary waveforms can be loaded and played through CSV files generated by external software (e.g. Microsoft Excel™, Matlab™, etc.).



Documentation is a required and important step in automotive testing. Compliance Test Studio supports with various functions for report generation: add customer information, test object data, test setup pictures and additional information. With the report editor the report content can be customized to create a meaningful report. Customize the test report template to include your company logo and address. Monitoring measurements and print screens of external instruments can also be added.
It is also possible to save the report within the Compliance Test Studio and reopen to modify. The report can be exported in various file formats which allows further processing and integration in overall test reports.



CTS.ExtFunctions license provides additional helpful tools to increase efficiency. Additional external instruments (e.g. multimeters, oscilloscopes, etc.) can be integrated and controlled by Compliance Test Studio software for monitoring and documentation of the applied signal and the EUT condition. The Link Test functions allows to compose complete test plans based on Standards Library and customized tests, combined with measurements from external instruments or react on EUT states via triggers. At the end, a combined test report for the complete test plan is created. With the Flow Chart feature a test flow can be programmed where the user is guided through the test based on conditions.

Available Licenses

License	Description
CTS.Automotive-INTL	Library with pre-programmed tests for automotive international standards (e.g. ISO), valid for all licensed devices within one system
CTS.Automotive-MFR	Library with pre-programmed tests for automotive OEM/manufacturer standards (e.g. Stellantis, Volkswagen, Mercedes, etc.), special licenses for Nissan and Renault on request, valid for all licensed devices within one system
CTS.Automotive-H&F	Library with pre-programmed tests for harmonics and flicker automotive standards (e.g. ECE R10, IEC 61851, Stellantis, Volkswagen, Mercedes, etc.), special licenses for Nissan and Renault on request, valid with a CTS.DeviceDPA license
CTS.ExtFunction	Extended features including report, link, flowchart, measuring instruments, iteration, interlink, import and export of test data , requires a device license

Supported Devices

Models	NetWave (all models), PowerWave, Ripple NX, DPA 50xN, AMP 200N, SNG 200P