

Ensure Your Product's Future Success With zigbee Certification

TÜV Rheinland is an Authorized Laboratory for zigbee Product Certification

One of the most widely adopted and fastest growing low-power communication protocols today is zigbee. Zigbee is an open standard based wireless communication protocol, built on IEEE 802.15.4. Zigbee has been developed to be the single interoperable radio frequency (RF) solution for various wireless IoT applications in Smart Homes and Smart Buildings. Zigbee is found in smart thermostats, smart blinds, smart door locks, smart lighting applications and more.

ZIGBEE ALLIANCE CERTIFICATION PROCESS

- Simplify wireless product integration
- Numerous zigbee global test locations (USA, Europe, Asia)
- Reduce costs and risks if you embed wireless connectivity
- Gain insight on this rapidly emerging standard
- Receive step-by-step guidance for final product certification
- TÜV Rheinland's test harness for zigbee Green Power is selected as the official zigbee test tool by the zigbee alliance
- Test harness provides early insight into the products zigbee performance, enabling in-house pre-testing during the design phase of the product
- TÜV Rheinland provides comprehensive wireless testing and certification services

BENEFITS AT A GLANCE

- Interoperability allows products from various manufacturers to communicate effectively with each other
- Low-power long lasting battery life
- Reliability if one product fails, standard allows other products to still communicate together
- Supported by global membership
- Open standard, based on IEEE 802.15.4
- Go-to-market flexibility
- Widely used protocol for smart devices
- Cost effective
- Easy to install, easy to use







TÜV Rheinland has added a new member to their portfolio of test tools for zigbee: the zigbee 3.0 test harness which can be used by zigbee product developers and manufacturers to test the compliance and performance of zigbee 3.0 products. The tool includes support for testing the zigbee Green Power basic proxy which is a mandatory function in zigbee 3.0. TÜV's zigbee 3.0 test harness enables manufacturers to do in-house testing of the product and provides early insight into the zigbee behavior of the product. This reduces overall testing time for the developer and speeds up time to market for the product.

A dedicated test harness is available for zigbee Green Power (ZGP) devices. TÜV Rheinland's ZGP test harness has been selected by the zigbee alliance as the official test tool for the testing and certification of zigbee Green Power devices. Both zigbee test harnesses consist of a software product along with a zigbee radio dongle (USB), which enables a computer to emulate various zigbee profiles and interact with a device under test.

PARTNERING WITH TÜV RHEINLAND

TÜV Rheinland has been a zigbee authorized test lab for over 10 years. TÜV Rheinland is your end-to-end test and certification provider of your zigbee compliant platform (ZCP) or zigbee compliant end product. We support all legacy zigbee application profiles such as zigbee home automation, zigbee light link, zigbee smart energy, and the latest zigbee specifications such as zigbee 3.0 and zigbee Green Power. Once the product passes all tests, TÜV Rheinland works directly with the zigbee alliance to submit the testing results for certification. Our experts can guide you through each step of the certification process.

BENEFITS OF ZIGBEE 3.0 AND GREEN POWER TEST **HARNESSES**

- Easy to use, simple UI
- Multiple windows showing test cases, detailed packet data and real time test results at one glance
- Can show pass/fail data plus detailed data to easily pinpoint errors
- Built in sniffer features
- Supports manual execution of test cases, both fully automated
- Customized test scripts derived from built in XML parser, as well as dynamic scripts (based on math calculations)
- Automated test report generation
- Ability to emulate full zigbee cluster library, emulate other zigbee devices, or set up virtual zigbee ecosystem
- Harness can be used to create a super zigbee device (a device that supports all ZCL clusters)
- Zigbee 3.0 test harness includes support for zigbee Green Power Basic Proxy and Sink
- Zigbee Green Power test harness uses Green power
- Windows based platform

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