



FREQUENTLY ASKED QUESTIONS

I. WHAT ADVANTAGES DO WAVECREST SIA INSTRUMENTS HAVE OVER OTHER PRODUCTS?

Wavecrest SIA instruments' unique twin-engine design combines the capabilities of a sampling oscilloscope for measuring amplitude, and a time interval analyzer for advanced jitter analysis.

At the same time, Wavecrest SIA instruments overcome the inherent weaknesses and limitations found in oscilloscopes, third-party oscilloscope software and bit error rate testers by:

- Generating more ACCURATE and REPEATABLE signal integrity data on FASTER timetables
- Providing COMPREHENSIVE DIAGNOSTICS
- Offering SEAMLESS CORRELATION from design to production
- Ensuring PRODUCT COMPLIANCE

ACCURATE and REPEATABLE signal integrity data is achieved by analyzing and reporting amplitude and timing measurements independently. This Wavecrest direct measurement technique contrasts the interpolation method used by oscilloscopes, which often produces inaccurate and unrepeatable results.

Through COMPREHENSIVE DIAGNOSTIC tools like advanced PLL/clock and datacom analysis, Wavecrest SIA instruments quantify the most important amplitude, noise and jitter parameters for complete characterization, debug and compliance analysis. This ensures more accurate and faster throughput, with higher yield rates, enabling you to move your product to market sooner.

Wavecrest instruments are specifically designed for ATE systems and stand-alone production units. Your lab and production facility can use identical Wavecrest test tools from the design/debug phase through device characterization. This ensures SEAMLESS CORRELATION from design to production.

Wavecrest SIA instruments implement a patented and industry accepted jitter separation methodology that is the reference standard for Fibre Channel, Serial ATA, PCI Express, Gigabit Ethernet, Infiniband and XAUI among others. By using our methodology, you can be assured that your end product will be industry COMPLIANT.

2. WHY DO I GET DIFFERENT NUMBERS ON WAVECREST SIA INSTRUMENTS AND MY REAL TIME OSCILLOSCOPE?

Wavecrest instruments provide measurement analysis above and beyond that of a scope. While oscilloscopes are general purpose for measuring amplitude, Wavecrest provides a high resolution, direct measurement method that gives independent, distinct data for amplitude *and* timing. Our analysis data is not derived from a low resolution, interpolation method.

3. HOW DOES WAVECREST HANDLE INTEROPERABILITY?

Interoperability, or the assurance that parts and products will work together, is the single greatest issue in the industry today. Interoperability results when products comply with industry standard specifications.

Industry standard specifications for testing and measuring jitter are based on Wavecrest's patented Tailfit™ methodology. Since our methodology is the standard reference, you are guaranteed that when measurements pass the tests, your devices are compliant and interoperable.

Additionally, Wavecrest participates in numerous interoperability labs and standards committees for many applications like PCI Express, Fibre Channel, Gigabit Ethernet among others. Participation in these events, along with the development of industry reference standard methodologies, ensure that your products will be interoperable in a multitude of applications and environments now and in the future.

4. HOW DOES THE PRICE OF WAVECREST SIA INSTRUMENTS COMPARE TO COMPETITORS?

Price of equipment needs to be measured in two ways; feature to feature comparison and value derived from total cost of test.

Since Wavecrest SIA instruments combine the capabilities of oscilloscopes, BERTs and time interval analyzers, comparing the price against one of these individual devices would be inaccurate. Feature for feature, our instruments provide more than each of these individually.

When looking at the price of a product, you also need to look at the value it brings to your total cost of test. The accuracy of Wavecrest SIA instruments minimizes the number of board spins you need to make. With fewer iterations, your cost is less. The comprehensive diagnostics help reveal previously undiagnosed problems, saving time and money. Additionally, the cost of parts found not working with a Wavecrest instrument is reduced significantly when found during initial testing rather than final production or even after it is returned by the customer.