Spectrum™ BT

Focused Functional Test Solution

The Spectrum BT is a fully integrated PXI-based test platform optimized for testing a focused group of Unit Under Tests (UUTs). The Spectrum BT provides best-in-class functional test capability and configurability at a size and price that meets the needs of engineering labs, manufacturing facilities, and depots.

Configurable. Compact. Compatible. Cost-effective.

The Spectrum BT can be configured for a wide array of test applications using PXI and LXI standards. The standards-based open architecture provides a vast number of options to meet the most demanding present and future test requirements.

The Spectrum BT replaces rack and stack test equipment with a well-packaged, compact system that can fit on a workbench, with an expansion capability via a mobile cart to cover a range of applications such as RF and optical where large instruments are needed.

For test applications that don't fit in the Spectrum BT, the solution can be built based on Spectrum HS, which is a larger, integrated test system by Teradyne. The Spectrum HS and Spectrum BT are fully compatible – supporting the same instrument suites, software, cables, and fixtures. Test programs and Interface Test Adapters (ITAs) can be shared across the platforms, providing the most cost-effective scalability for various manufacturing and product support strategies.

The Spectrum BT maximizes your return on investment for a focused test solution. The fully integrated, standard system includes system cooling, self-test, wire verification test, and an extensive documentation package – providing savings on non-recurring spends for documentation and engineering. System flexible sizing matches your test needs with minimum investment. Teradyne's large standard instrument portfolio reduces integration time and cost. System compatibility and common user interfaces across all Teradyne test platforms help preserve Test Program Set (TPS) investments and minimize user training costs.

Key Features

- Optimized for focused test solution
- Configurable and open architecture
- Supports all industry standard PXI and LXI instruments
- Compact bench top platform, expandable with mobile cart
- Fully compatible with Spectrum HS software, cables, and fixtures
- Preconfigured solutions starting under $100K
- CE and NRTL certified

Typical Test Applications

- Focused test solution addressing a focused set of UUTs
- Common and scalable solution for multi-site and outsourced manufacturing
- Design Verification and system integration testing
- TPS development

System Options

System Component	Options
Expansion	• Spectrum BT mobile cart (additional 11U rackmount expansion frame)
PXIe Chassis	• 8-slot PXIe Chassis • 18-slot PXIe Chassis
Receiver	• Full G20 receiver for mass interconnects • Full G20X receiver for Spectrum HS compatibility (available with mobile cart)
PDU	• Single phase • Three phase (available with mobile cart

Instrument Options

• Digital bus test instruments

• Real-time processing and storage instruments for data-intensive testing

• Optical test instruments

• Digital/optical switching

• Analog instruments

• RF instruments or subsystems

• RF switching or custom RFIU

Proven Performance, Long-Term Support

Teradyne integrated test system includes system cooling, self-test, wire verification test, real time monitoring of critical system health and safety features, and extensive documentation package. All models are designed, built, and backed by Teradyne's applications expertise, long-term life cycle support, and a worldwide maintenance infrastructure that ensures on-site assistance, rapid setup, and implementation, as well as various spare parts strategies including next-day spare parts service.

Complete Test Solution

Testing today's advanced electronics not only involves implementing new test systems, but also performing other tasks necessary to support and execute tests efficiently. Managing schedule risk and budget of such activities are often impacted by technical challenges and limited resources.

Teradyne Total Test Solution delivers a complete test solution that solves customer's specific requirements at a defined cost and schedule. Total Test Solution capabilities include test equipment and test application development, TPS development (test programs and test fixtures), factory integration and automation, project-based engineering services, as well as customer-specific support contracts. A Teradyne Total Test Solution is an investment in people, processes, information, and technologies that encompasses Teradyne's complete product portfolio.

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