

## JDSU Test and Measurement Product Offerings for Government, Aerospace, and Defense

An overview of JDSU test and measurement products and services for tactical, infrastructure, data center, lab, and NOC applications

Portable test instruments for tactical, tech control and camp/post/station environments



T-BERD 2000

### T-BERD® 2000

Hands-free test set for fiber-optic network installation, turn-up, and maintenance

The JDSU T-BERD 2000 multitest platform gives field technicians a single handheld unit they can use to install, turn-up, and maintain fiber networks to the highest standards. Its innovative design and hands-free bag ensure that all essential fiber test tools are close at hand for any job anywhere. A large color screen with graphical user interface (GUI) drives simple operation and optimal workflow in the field.

Test capabilities include various OTDR modules for multimode and single-mode testing, as well as a range of FiberComplete® modules for automated insertion loss/optical return loss (IL/ORL), and fault finding. Both OTDR and FiberComplete modules are passive optical network (PON) optimized. The unit is also ready for connector end-face pass/fail analysis to IEC standards with a digital analysis microscope.



T-BERD 5800

### T-BERD 5800

Handheld network tester addresses the challenges of Carrier Ethernet evolution

The T-BERD 5800 supports testing throughout the entire service life cycle, including service activation, troubleshooting, and maintenance for both legacy and emerging technologies that must handle network applications such as metro/core and business services installations. Integrated J-Complete functionality, such as capture/decode and automated J-Mentor, guides field technicians through troubleshooting without carrying a separate analyzer instrument.



T-BERD 6000A

### T-BERD 6000A

Compact and highly integrated test platform for fiber and Ethernet/IP-based networks

The JDSU T-BERD 6000A is designed for all phases of the fiber and Ethernet/Internet Protocol (IP) and serial datacom network life cycle. It provides field service technicians with the highest levels of performance and upgradeability on the market, providing over 40 different modules supporting a wide range of applications. The versatility of the T-BERD 6000A allows technicians to standardize using one type of test equipment and then introduce new testing capabilities in the field without incurring additional training and device costs. The Multi-Service Applications Module (MSAM) can test any interface in a metro network from Ethernet and Fibre Channel business services to backbone OTN, SONET/SDH, T1/E1, serial datacom, and conditioned diphas (CDI).

## Portable test instruments for tactical, tech control and camp/post/station environments



T-BERD 8000

### T-BERD 8000

#### Multi-application platform for physical, optical, and transport/Ethernet testing

The JDSU T-BERD 8000 platform is the industry's most innovative, versatile test solution for modern and future high-speed transmission network deployments. It covers traditional fiber and BERT testing as well as advanced high-speed ROADM testing and 40/100 G service activation, maintenance, and troubleshooting with a mix of more than 40 apps and hundreds of test configurations to meet your exact testing needs.



HST-3000

### HST-3000

#### Test everything over IP and real-time services with one instrument

With options for testing IP versions 4 (IPv4) and 6 (IPv6), VoIP, IP video, as well as legacy T1, Integrated Services Digital Network (ISDN), Digital Signal Level 3 (DS3), frame relay, serial datacom, and Digital Subscriber Line (DSL) in the same platform, the HST-3000 is the ideal test platform for migrating from circuit to packet-switched networks. Its modular design allows for quick and easy field upgrades. Sophisticated software lets you use a single instrument for multiple applications. Built-in automated test suites improve the efficiency and consistency of the test processes, ensuring accurate results.



HP3-60-P

### Fiber Optic Inspection, Cleaning, and Testing

#### Unique, low-cost solution that integrates essential tools for testing fiber

JDSU inspection, cleaning, and test solutions include the HP3 series inspection and test system that combines fiber inspection and optical power measurement into a single seamless handheld device to significantly increase workflow efficiency and decrease overall inspection and test time. The integrated video display provides high-quality image resolution in a compact, portable design. Users can view images with the integrated patch cord microscope, or connect an analog video probe microscope for inspecting connectors behind a bulkhead. The integrated power meter lets users quickly, easily, and conveniently measure optical power and attenuation in the field. Easy push-button operation makes the device simple and straightforward, while the inspection-test process optimizes workflow practices.

## Portable test instruments for tactical, tech control and camp/post/station environments



SmartClass Optical Handheld

### SmartClass™ Fiber Handheld Solutions

Inspect, test, save, and certify with one compact device

The JDSU SmartClass Fiber Family of optical handheld tools provide ultimate flexibility and performance in an easy-to-use solution that can instantly turn any user into a “fiber smart” technician by integrating the essential fiber test capabilities into one portable device. Ideal for users at any skill level, SmartClass Fiber products automate pass/fail acceptance results for both end-face quality and optical power measurement at the push of a button. In addition, users can save their test results and generate certification reports to document work quality. By integrating these essential capabilities into one system, SmartClass Fiber products drive the technicians’ behavior to implement today’s best practices in a seamless workflow to optimize efficiency and reliability to get the job done right the first time.



P5000i Probe

### P5000i Digital Fiber Microscope

Automated fiber inspection and analysis probe

The P5000i is a digital video analysis probe microscope that lets technicians quickly and easily certify that every network connection is clear and optimized. This intelligent fiber microscope removes the guesswork from fiber inspection with reliable, objective pass/fail analysis so you can offer your customers the best user experience possible. It also enables pass/fail analysis with many JDSU test solutions that users already rely on for essential network testing. It easily connects to numerous devices including SmartClass Fiber, T-BERD 2000/4000/6000, Certifier40G, HST-3000, DSAM, and a laptop/PC via USB without the need for additional adapters.



Certifier40G

### Certifier40G Cable Certifier

The only enterprise test solution that measures frequencies for all current and future cabling standards required for new enterprise copper and fiber

The Certifier40G is the most advanced, fastest, and most complete solution available for certifying copper or fiber. The industry’s fastest CAT6A solution can certify each cable within 9-seconds, saving users 30 minutes each time they test 150 CAT6A cables.\* Users can complete Tier-1 fiber certification for multimode, single-mode, or multimode MPO in less than 6 seconds with automated pass/fail end-face analysis (with the P5000i Digital Fiber Microscope), and they can analyze all fiber types. It gives users complete test visibility at both local and remote ends, and ships preconfigured with all leading manufacturers’ cabling specifications.

\*Time savings based on CAT6A cable testing with other existing cable certifiers.

## Instruments for lab, research and development, and data centers



ONT-600

### ONT Family

Highly configurable, multi-application and multiport platform for system verification and acceptance testing up to 100 G

The Optical Network Tester (ONT) platform is a multifunctional, multiport, and multi-user solution for fast, flexible testing of optical transport network environments. All ONT models address optical and digital testing needs for research and development (R&D), system verification testing (SVT), production, and troubleshooting. JDSU offers several instrument plug-in modules for packet-based services like Ethernet and Fibre Channel (FC) and for transport services like OTN and SDH/SONET, as well as most services in combination with jitter/wander. Designed to keep pace with the evolution of today's high-speed communications technology, the ONT is an essential test tool for manufacturers, early technology installers, and network operator verification labs.



MAP-200

### Multiple Application Platform (MAP-200)

Optical test and measurement platform optimized to cost-effectively develop and manufacture optical transmission network elements

The optimized MAP-200 optical test and measurement platform is used to cost-effectively develop and manufacture optical transmission network elements. Today's rapidly changing optical market requires investing in productivity-enhancing technologies and tools, making the scalable MAP-200 test platform the best too for use in even the most stringent environments.

Based on the earlier Multiple Application Platform (MAP), the MAP-200 builds on the differentiation of offering the broadest module portfolio in the densest and most configurable platform. The MAP-200 is optimized for test applications in both lab and manufacturing environments ranging from insertion loss testing to dispersion penalty testing.

## Instruments for lab, research and development, and data centers

### Optical Switch Solutions

A wide range of optical switching solutions independent of data rate and transmission format

The mOSW-C1 Optical Switch Module and mISW Optical Switch tray are built on the industry-leading, fourth-generation instrumentation class of JDSU optical switch technology. With more than 30 years of leadership in optical switching across network, monitoring, and manufacturing applications, the mOSW-C1/mISW-C1 represents a new milestone for performance and reliability offered in the industry's smallest footprint.

Now for the first time, the performance and repeatability found in large, fixed format 19-inch JDSU rack-mount systems are available in a modular plug-in, or tray. Leveraging the mOSW-C1/mISW-C1 can reduce the size of switching systems by as much as 75 percent while still delivering the performance of much larger legacy systems. A 50 percent increase in switching speeds significantly reduces testing time for connection-intensive architectures.



Optical Switch Solutions

### Xgig® Data Center and Storage Networking Test Solution

Powerful protocol test solution suite for Fibre Channel, Gigabit Ethernet, and SAS/SATA links operating at various data rates

The Xgig Secure System chassis is a high-performance distributed monitoring, analysis, and protocol testing system with removable storage that addresses the extensive security needs of primary contractors and government facilities. This addition to the Xgig family uses standard Xgig blades and software to provide flexible, comprehensive testing and verification of components, nodes, and switches for Fibre Channel, Gigabit Ethernet, and SAS/SATA protocols.



Xgig Secure System

### Distributed Network Analyzer (DNA)

Advanced protocol analysis and extensive diagnostic capabilities

The Distributed Network Analyzer (DNA) hardware platform brings greater power for collecting and analyzing real-time data over multiple technologies such as Ethernet, ATM, POS, Frame Relay, IPv6, MPLS, VoIP, IPTV, HSDPA, HSUPA, UMTS, GPRS, and CDMA.

The scalable DNA hardware platform provides the foundation for the advanced protocol analysis architecture for fixed and mobile network applications during performance verification, installation, and maintenance. Coupling the DNA hardware with the Network Analyzer software application provides you with a powerful wire-line solution for LAN and WAN networks. Coupling it with Triple Play Analyzer software lets you perform IPTV, VoD, and VoIP QoE analysis. Similarly, use the hardware in conjunction with Signaling Analyzer software to create an advanced mobile-network analysis solution for 2 G, 2.5 G, and 3 G technologies.



Distributed Network Analyzer

## Instruments for RF, Network Protocol, and Capacity Test



CellAdvisor Cable and Antenna Analyzer

### CellAdvisor Cable and Antenna Analyzers

The JD720 family has all of the measurement functions necessary to accurately verify the cell-site transmission line and antenna system from signal reflections (VSWR or return loss) to RF or optical transmission power and distance to fault (DTF). It also lets users inspect cell site fiber links via the P5000i microscope and measure optical power using the JDSU MP-60A/MP-80A sensors.



CellAdvisor Base Station Analyzer

### CellAdvisor™ Base Station Analyzers

The CellAdvisor Base Station Analyzers (JD745A and JD785A) are comprehensive solutions providing all the functionality to effectively test any cell site, including spectrum analysis, cable and antenna analysis, power meter, interference analysis, channel scanner, E1/T1 analysis, and signal analysis. Their rugged design is ideal for working in harsh cell site environments. The backlit key panel lets users perform maintenance tasks in dark areas.



CellAdvisor RF Analyzer

### CellAdvisor RF Analyzers

The CellAdvisor combines the functionality of spectrum analysis, cable and antenna analysis, and power measurements, covering all the measurements required for test, acceptance, and troubleshooting the physical layer of cellular networks. The CellAdvisor RF Analyzer is the ideal field testing solution because of its portability, lightweight design, extended battery operation, and performance combined with its multifunction capability. Its rugged enclosure is ideal for working in harsh environments, and its backlit key panel helps users perform maintenance tasks in dark areas.

The CellAdvisor RF Analyzer offers comprehensive RF performance measurements such as channel power, adjacent channel power, occupied bandwidth, return loss, tower-mounted amplifier's gain, and distance to fault location.

## Instruments for RF, Network Protocol, and Capacity Test



PacketInsight

### PacketInsight™

Identify. Extract. Analyze.

JDSU PacketInsight is a protocol test, analysis, and network diagnostic solution for wireless and wireline IP-based networks. It also covers wireline testing for LAN, WAN, and ATM networks, including triple-play video networks. PacketInsight is an intelligent packet capture appliance offering a revolutionary real-time network monitoring and diagnostics tool. It can uniquely and intelligently capture specific network traffic while performing lightning fast real-time post-capture flow analysis of correlated control and user plane traffic.



Capacity Advisor

### CapacityAdvisor Portfolio

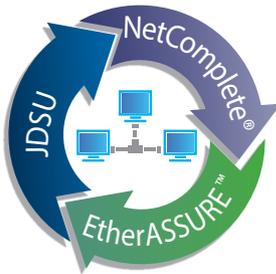
Provides advanced load generation for 3G and 4G networks

Capacity test provides advanced load generation for 3G and 4G networks, giving customers an unmatched ability to test equipment and services under realistic traffic scenarios in their labs. JDSU assists radio access network (RAN) manufacturers and wireless network operators in lowering testing costs, improving network and product release quality. This enables faster time to revenue by cost-effectively simulating thousands of devices with real-world traffic profiles in a scalable test system for a true end-to-end solution for wireless customers.

## Service Assurance Solutions



### PacketPortal®



PacketPortal JMEP SFProbe®

### Network Intelligence and Analytics

JDSU PacketPortal® is a Smart Network Application Platform (SNAP) which provides real-time intelligence and analytics from the network edge, including remote offices and locations.

PacketPortal uses centralized software and distributed microprobes with unprecedented scalability to enable visibility and testability throughout networks, minimizing the complexity of multivendor environments by providing homogeneous data and analytics.

### Intelligent Visibility Solutions

JDSU PacketPortal for Intelligence Visibility analyzes customer content and network information to provide real-time data and analytics to manage the customer experience effectively with real-time analytics, accelerated troubleshooting, and insight into service and application performance.

### NetComplete® EtherASSURE™

A scalable service-assurance solution to reliably and profitably deliver Ethernet services

NetComplete EtherASSURE is a scalable, vendor-agnostic service-assurance solution ideally suited to enable lean, efficient processes for new Ethernet services activation and quality-level monitoring. EtherASSURE lets service providers deliver optimal service quality to match customer expectations. It increases subscriber satisfaction and loyalty while reducing operational costs and increasing profits.

### PacketPortal JMEP SFProbe

PacketPortal for Ethernet Assurance uses distributed JDSU Micro Ethernet Probes (JMEP) to support service activation and performance monitoring capabilities. PacketPortal JMEP measures key performance indicators like network delay, jitter, and packet loss to guarantee service-level agreements (SLAs) are met in mobile backhaul and business services networks.

PacketPortal enables consistent test and performance monitoring capabilities, helping to improve operational efficiency. Compatible with the T-BERD test instrument portfolio, QT-600, and the NetComplete EtherASSURE portfolio, PacketPortal JMEP is easy to use and deploy, and equips any standard Gigabit Ethernet port with standards-based OAM.

## Service Assurance Solutions

### QT-600 Ethernet Probe Portfolio

Fully automates service activation and verification for Carrier Ethernet applications, including business services and mobile backhaul



QT-600

The JDSU QT-600 is a Carrier-grade, scalable, Ethernet probe that delivers the test and troubleshooting capabilities required to deploy Ethernet with confidence. An integral component of the JDSU NetComplete EtherASSURE solution, the QT-600 reduces operations costs with its streamlined service turn-up process and rapid segmentation abilities that quickly identify problem sources. The detailed test results it generates give service providers the confidence to guarantee service-level performance.

### JNID – Network Interface Devices

Designed for intelligent service demarcation at the edge of your network and high-capacity 10GE



JNID

The JDSU JNID-112 and JNID-114 cost-effectively deliver assured fiber-based carrier Ethernet services for mobile-backhaul and wholesale Ethernet applications. This series of ultra-compact first-mile demarcation devices offers a full range of multirate-capable Ethernet interfaces. A temperature-hardened design and optional network link protection ensures the highest service availability even in harsh environments.

The JNID-210 is a high-capacity 10 Gigabit Ethernet (GE) aggregation solution that cost-effectively delivers carrier Ethernet 2.0 services and highly accurate synchronization over fiber-based access networks. The non-blocking design supports traffic aggregation from up to 16 GE ports and/or two 10 GE ports on hot-swappable access interface modules. Network interface protection, redundant power supplies, and a temperature-hardened design ensure highest service availability.



Video Stream Analyzer

### Video Stream Analyzer (VSA)

Comprehensive monitoring probe and integrated real-time MPEG video analyzer for deep dive analysis

VSA simplifies the complexities of assuring service quality, especially at the network edge, for a more enriched viewer experience. It simultaneously measures IP transmission, MPEG service layers, and content while providing visibility into metadata. These VSA capabilities combine to give video service providers optimal video troubleshooting and monitoring, including audio loudness to ensure CALM compliance.



ONMSi

### Optical Network Management System

Comprehensive hardware and software platform for fiber network management

The Optical Network Management System (ONMSi) monitors the physical layer and generates real-time alarms for events such as security breaches and hardware malfunctions or OSS, database, and application software problems. It can detect and locate faults and degradation on the fiber optic links and run all diagnostics without taking hardware or software out of service. Sophisticated reporting and documentation management are combined with fiber monitoring (remote fiber test set, RFTS), fiber mapping, and complete QoS reporting.

## JDSU Services



### Fiber Characterization Service

Complete qualification of advanced optical networks

JDSU offers the most extensive network qualification expertise in the industry to help organizations verify fiber plant infrastructure for high-speed networks, perform staging tests for new DWDM, ROADM, and 40 G configurations, and to qualify end-to-end services, including burn-in testing. Whether increasing the speed or density of traffic on an existing network or verifying the quality of a fiber installation prior to deployment, the information provided in this comprehensive report allows for proper planning of network deployments and satisfies the most stringent network acceptance requirements.



Save on Test Equipment You Trust

### JDSU Certified Equipment

The ENCORE Program provides a reliable source for used equipment

The JDSU ENCORE Program allows for the purchase of used JDSU equipment while providing the same confidence as when purchasing new equipment. The ENCORE Program provides guaranteed products that meet original JDSU product specifications.

### Product Support Services

#### Extended Warranty

Extended warranty allows control for unplanned maintenance and repair costs. Instruments under extended warranties are covered under the same industry-leading warranty that protects every new JDSU product.

#### Calibration

JDSU offers ISO-certified on-site or return-to-factory calibration for JDSU and non-JDSU instruments, thus providing a one-stop solution for all calibration and calibration-management needs.

#### Repair

JDSU together with its strategic partners offer repair and repair management services for test equipment and general instrumentation products used to support networks resulting in a single supplier providing all test instrument repair needs and assurance that all of the services provided will conform to JDSU quality and accountability standards.





## JDSU Services

### StrataSync®

#### Empower Your Assets

StrataSync is a hosted, cloud-enabled solution that manages assets, configurations, and test-data for all JDSU instruments to ensure they are equipped with the latest software and have the latest options installed. It manages inventory, test results, and performance data anywhere with browser-based ease and improves technician and instrument efficiency. StrataSync also manages and tracks test instruments, collects and analyzes results from the entire network, and informs and trains the workforce.

### Education Services

#### Increases workforce knowledge and skills

JDSU Education Services include courses such as product training, fundamentals, and test applications to guarantee your staff receives the exact information needed to improve on-the-job performance. Course formats include public training, on-site training, virtual classrooms, and self-paced training.

For a complete list of offerings, visit [www.jdsu.com/nse](http://www.jdsu.com/nse) or contact your dedicated sales representative.

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