Network equipment manufacturers (NEMs) and service providers face significant challenges in bringing carrier-grade Metro Ethernet (ME) products and services to market, including verification of network elements, reduction of installation times, and assurance of service reliability. While organizations, such as the Metro Ethernet Forum, ITU, IEEE, and IETF, have developed certification standards, further work is required to make Metro Ethernet more suitable for the emerging suite of next generation services.

**Comprehensive test coverage throughout the product and deployment lifecycle**

JDSU’s portfolio, a suite of instruments, systems, and software, is purpose-built to address today’s challenges, providing an integrated end-to-end approach toward testing Metro Ethernet products and services. This approach provides key problem-solving capabilities beginning with verifying network element behavior in the lab to providing consistent and repeatable processes for turning up new services in the field to overall problem sectionalization and fault isolation in order to assure service integrity.
Metro Ethernet Test & Measurement Portfolio

ONT-506 – A portable lab and SVT solution that supports the development of new technologies for the verification of network elements. This platform supports traditional DSn/PDH, SONET/SDH/OTN, and Ethernet technologies at bit rates from 1.5 Mb/s to 43 Gb/s, including 10/100/1000M Ethernet.

ONT-512 – A rack-mountable solution for SVT and production that allows for the fulfillment of their special testing requirements with a high degree of port density and multi-user automation. This platform supports traditional DSn/PDH, SONET/SDH/OTN, and Ethernet technologies at bit rates from 1.5 Mb/s to 43 Gb/s, including 10/100/1000M Ethernet.

FST-2802 TestPad – A portable field test instrument targeted for the installation and maintenance of Metro Ethernet services, featuring a variety of technologies on a widely accepted test platform. Test capabilities include bit error rate testing (BERT) and verifying frame loss and round trip delay (RTD) as per Metro Ethernet service level agreements (SLAs). Advanced features, such as multiple streams or VLAN discovery, allow for the testing of true customer traffic conditions in the network.

T-BERD/MTS 8000 Transport Module – A next-generation, modular, and cost-effective platform solution, featuring an innovative design that combines traditional SONET/SDH testing and Ethernet/IP testing—all in a single test module. The Transport Module supports 10 Mb/s to 10 Gb/s Ethernet testing, ensuring that proven test methodologies for Ethernet services remain the same—regardless of the rate. The Transport Module offers a blend of BERT and Ethernet/IP (L1 thru L3) test capabilities in a superior, portable design.

HST-3000 Ethernet Module – A portable handheld test instrument designed for field technicians who are responsible for turning up numerous services in Metro and Access networks. The HST-3000 Ethernet module provides a rich feature set ranging from physical layer testing (cable diagnostics) to application layer testing (VoIP and Video). This unique blend of features, combined in a single Ethernet module, makes the HST-3000 the premier tool of choice for the roll out of next-generation Metro Ethernet services.

SmartClass Ethernet – A cost-effective and rugged portable test instrument designed for field technicians who are responsible for installing Ethernet and IP services. The SmartClass Ethernet’s test capabilities, which range from cable diagnostics to RFC 2544 testing, enable service providers to successfully verify Metro Ethernet SLAs at installation.

DA-3400 Data/IP Analyzer – A portable protocol analyzer designed for service support engineers tasked with troubleshooting IP layer and above problems. The DA-3400 is a multi-technology, 7-layer, hardware-based IP analyzer, which is purposely built to identify root cause impairments by providing expert analysis in order to pinpoint and solve complex IP, VoIP, and application problems.

NetComplete ME Service Assurance Solution with the QT-600 – A service assurance solution that provides service turn-up verification, problem segmentation, and troubleshooting test capabilities. NetComplete provides automated, centralized remote testing capabilities complete with drill down IP and data analysis functionality, allowing the service provider to quickly and efficiently identify and resolve service degradations in their networks.