

# Enterprise / IT Test Catalogue

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SmartClass Ethernet Test Set

SUMITOMO ELECTRIC

TuffCat Type-66 Mass Fusion Splicer

FIT-S105 Fibre Essentials Toolkit

JDSU

**JDSU** Certifier40G Cable Certifier

sales

rentals

calibration

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disposal

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### **Ethernet Testing**

## 🔷 JDSU

#### Dual Port (one port 10M-10G, one port 10M-4G) MSAM

C1004



- Dual port (one port 10 Mb/s to 10 Gb/s, one port 10 Mb/s to 2.5 Gb/s) Module
- Modular form factor enables field upgrade of test capabilities by adding or replacing Physical Interface Modules and optics
- Multi-service capability allows simultaneous Ethernet and SONET/SDH testing
- Performs two independent tests in parallel with dual-port chassis
- · Provides support for VLAN, Q-in-Q, VPLS, MPLS Tunnelling applications, and IP

Works in conjunction with the MTS-6000A

## 🔷 **JDSU** CSC-ETHTR

#### SmartClass Ethernet (10/100/1000 and Gig-E) Services Testing

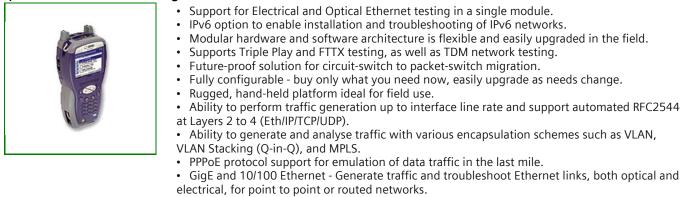


The SmartClass Ethernet product is an easy to use, cost effective Ethernet testing solution for basic physical layer cable testing, layer 2 and layer 3 traffic generation, and full RFC 2544 testing. The rugged, battery operated, application specific test tool enables field technicians to turn-up Ethernet and IP services by running an RFC 2544 test or following a set of methods and procedures. The product has been designed for front-line technicians who do not have experience dealing with emerging Metro Ethernet technologies and need a simple to use solution for Ethernet and IP testing. The SmartClass product comes in two major configurations, one a loopback only device and the other featuring full traffic generation.

## Units can be configured with copper or copper and fibre. Loopback only units also available

## **JDSU** HST3000-ETH-P3

#### **Optical Ethernet Gold Package**



## Portable test set addressing the needs of Layer 1 through Layer 7 testing with IPv6 compatibility, RFC 2544 testing

## 🔷 JDSU MTS4-DIS-LANOPMUFL

### MTS-4000 Multiple Services Test Platform with Enterprise Services Application Module (ESAM)



Perform all-in-one enterprise testing: verify that copper cables support gigabit Ethernet, test network connectivity (from Ethernet interface discovery to Layer 4 Port connectivity), discover network devices both on and off the subnet, collect statistics and analyse network utilisation/traffic patterns and perform wirespeed capture on gigabit Ethernet links Speed certify electrical Ethernet up to 1000BASE-T

Isolate and resolve Ethernet or IP problems in the field using unique, in-depth JDSU J-Mentor capture and decode capabilities

### **Fusion Splicers**

Fusion splicing is the act of joining two optical fibers end-to-end using heat. The goal is to fuse the two fibers together in such a way that light passing through the fibers is not scattered or reflected back by the splice, and so that the splice and the region surrounding it are almost as strong as the virgin fiber itself. The process of fusion splicing involves using localized heat to melt or fuse the ends of two optical fibers together.





### Dual Heater Core Alignment Splicer



Sumitomo's Type-39 FastCat<sup>™</sup> Core Alignment Fusion splicer is the industry's first splicer to feature a Dual-Automatic Heater System featuring Auto Start Heater and Auto Start Splice functions — making the FastCat the fastest splicer available today. The Type-39 FastCat's advanced electronic design, which accommodates the built-in dual heating system and simultaneous operation, reduces the bottle neck of "heater wait time" by 88%. With an individual heater cycle time of only 30 seconds (60mm Fiber Protection Sleeves) and a splice cycle of only 9 seconds, the FastCat improves splicing efficiency by 70%.

### LAN Cable Testing

## 🔷 **JDSU** NT1155

#### UalidatorPRO-NT Ethernet speed certifier



- Measures optical power on single mode and multimode fiber
- Conducts BER testing to speed certify Ethernet data transmission speed up to 1000BASE-T (1 Gb/s)
- Measures SNR and skew to uncover impairments to electrical Ethernet data transmission
- Tests for opens, shorts, split pairs, miswires, and reversals and measures distance to opens
- and shorts-supports all copper network, telco, and coax cables
- Measure PoE voltage and current (NT only)
- Performs port discovery to detect advertised Ethernet speed and displays capabilities of network devices (NT only)
- Pings network devices to verify connectivity to active equipment (NT only)
- Discover and display essential information regarding functionality of 802.11 b/g/n wireless devices (NT only)

• Includes Plan-Um software to create network layout; document cable tests; show network topology; and record moves, adds, and changes

Includes optical, electrical and wireless testing functionality!

### 🔷 JDSU

### Certifier40G

#### **Next-Generation Cable Certifier**



The revolutionary Touch2 design, with intuitive touch screen at both ends makes using the Certifier40G the easiest cable tester ever. The full screen at both ends allows users in the field to minimize their walking time by initiating, configuring, and storing tests from either side of a link or channel. Minimize time spent transferring results off the tester with the capacity to store over 2,000 full Cat-6A graph results. Market-leading 9 second Cat-6A certification time and 15 second Class FA certification ensures maximum installer productivity. The next-generation measurement engine can measure above and beyond the frequencies of current testers, certifying Class-FA frequencies with full Level IV accuracy. The Certifier40G can measure frequencies for all current standards and future cabling standards required for copper cables. The JDSU Certifier40G drives maximum value with a flexible, cost-effective permanent link design, field rugged casing, and simple modular upgrade path. The identical local and remote units make inventory and repair easier. The wide frequency range of the base feature set eliminates further license costs when upgrading for new technologies.

Full certification of copper and optical installations

### **Multi-Function Test Sets**

## **JDSU** MTS-4000

#### All-in-one Access/FTTx/Triple-Play Services Test Set



The MTS-4000 is a small, compact and handheld test platform designed for all phases of the network lifecycle, from the installation to the maintenance of Access/FTTx networks and triple-play services. Modular in design, the MTS-4000 offers field service technicians the highest performance and superior levels of scalability and upgradeability.

Fiber test applications include OTDR, PON meter, video inspection scope, laser source/power meter, and VFL.

Also can be configured to offer many copper test applications.

Test platform for both Copper and Fibre testing.... Ask us how this can suit your multiple requirements.

## **JDSU** MTS-6000

#### **Compact Optical Test Platform**



Highly integrated field optical test solution for single application. The MTS-6000 is a compact and lightweight test platform designed for the installation and maintenance of fiber networks. It offers field service technicians the highest levels of performance and upgradeability on the market. Modular in design, the MTS-6000 offers an extensive portfolio of test functionality, with over 40 different fiber modules supporting a wide range of applications, and is a single source for future fiber and photonic testing needs.

- Compact and lightweight for the field
- Future proof with over 40 application modules already supported
- Choose from IL/ORL, OTDR, PMD, CD, or WDM plug-in modules
- Application modules compatible with MTS-8000
- Backwards compatibility with existing MTS-5000 family OTDR modules
- Simple for the novice, fully featured for the expert

## STANDED TES-6000A

#### **Compact Network Test Platform**



MTS-6000A is a compact and lightweight test platform designed for all phases of network lifecycle from the installation to the maintenance of fiber networks. Modular in design, the MTS-6000A offers an extensive portfolio of test functionality for multiple network layers. A single Multi-Services Application module provides an integrated solution for Ethernet, SONET/SDH, and higher-layer tests. Optical Modules allow thorough testing of short-haul, long-haul, FTTx, CWDM, and high speed 40Gbps networks

- Compact, lightweight, rugged, and highly integrated platform
- Multi-layer network solution from physical to services layer
- Visual fault locator and loss test set functions are available
- Next Generation Carrier Ethernet Test Solution
- Backwards compatible with existing MTS-5000 optical modules
- Ethernet, SDH, PDH, WDM, IL/ORL, PMP/CD and OTDR modules available

### **Optical Fibre Inspection**

## 🔷 JDSU

### FBP-SD01

#### P5000 Digital Probe and FiberChek2 Aduanced Kit



FiberChek2 is an advanced application that determines the acceptability of optical fiber end faces through automated inspection and analysis. It identifies and characterizes defects and contamination and determines their location relative to the fiber core. It then provides a PASS or FAIL result according to a pre-configured failure criteria setting.

The P5000 digital probe microscope connects directly to a PC or laptop via a USB 2.0 connection, and the unique QuickCaptureTM button lets users capture, inspects, and analyses a fiber end face image in a single automated step.

- Dual-magnification (200/400X) P5000 digital probe microscope with
- USB 2.0 plug
- FiberChek2 automated fiber inspection and analysis software
- Interchangeable FBPT inspection tips (4) in tip case:
- SC-PC bulkhead
- LC-PC bulkhead
- Universal 2.5 mm PC patch cord
- Universal 1.25 mm PC patch cord
- Carrying case

#### Meet key IEC standards in inspection and reporting

## 🔷 JDSU FBP-SM05

#### INSPECTION KIT 200/400X FBP PROBE W/HD3-P4 DISPLAY



FBP-SM05 includes an FBP series Dual Magnification (200/400X) Probe Microscope with an integrated HD3-P4 display (includes a power supply/charger with US plug). Also included are 2 FBPT series inspection tips (SC & LC) for bulkhead inspection and 2 FMAE adapters (Univ. 2.5mm and Univ 1.25mm) for inspecting patch cords. Kit also includes a carrying case which holds all the components of this kit.

The HD3-P display further expands the value of the popular HD3 series by integrating a PATCHCORD MICROSCOPE (PCM) into the compact design. The result is a significant increase in workflow efficiency and decrease in total inspection time. By combining the power of two microscopes into one system, the HD3-P enables you to inspect both the "female" (bulkhead) and "male" (patch cord) sides of a fiber interconnect at the same time. The patch cord scope accepts our FMAE Series adapters, but is configurable to accept FMA Series adapters with the use of a coupler. The HD3 product line provides ultimate portability and workflow in field applications with a compact design that fits in the palm of your hand.

- 1.8" TFT LCD display
- Power-saving GripSwitch™ feature designed for comfort and efficiency provides instant-ON
- when held in hand and turns power OFF when released, to extend battery life.
- Built-in rechargeable NiMH battery pack with 3 hours (continuous) run time.
- Low battery warning LED illuminates when battery life has <30 minutes remaining.

Inspect patchcords and bulkheads in half the time

### **Optical Light Source**

## SU OLS-34

### 0LS-34, LED Source, 850/1300nm

- The OLS-34 is dedicated to LAN/WAN Access and Enterprise multimode networks
  - The ideal complementary tools to the OLP-3x to measure the insertion loss and test the continuity in multimode datacom and local area networks
  - Micro USB interface for power supply
  - One output port for 2 wavelengths
  - 3-years calibration period
  - Can be part of the SmartPocket Optical Test Kits

### **Optical Power Meters**

An optical power meter is a device used to measure the power received at a certain point in a optical fibre network. Most commonly used for testing average power in optical fibre systems, however can can be designed and calibrated to test specific networks and wavelengths. Used in conjunction with a suitable light source, insertion loss measurements can be recorded being the most common results required for verification of network functionality.



### 🔷 JDSU MP-80A

### USB Optical Power Meter-High Power: With Software and Acc.



The new MP-series Power Meter from JDSU is a miniature device that measures optical power via a USB 2.0 connection to a PC/laptop. This unique device makes digital processing of optical power measurements possible and integrates directly with the JDSU FiberChek2 software, the industry-leading automated fiber inspection and analysis program. Its size, functionality, and ease-of-use makes it an extremely useful and practical tool when testing optical power levels. The simple, straightforward, and intuitive software interface offers a well-organized digital solution to both fiber inspection and test procedures.

### 🔷 **JDSU** OLP-34

#### OLP-34 Optical Power meter, Ge, with USB



- The OLP-34 (Ge) is dedicated to LAN/WAN Access and Enterprise multimode or single mode applications.
- JDSU SmartPocket Optical Power Meters (OLP-34, OLP-35, and OLP-38) offer an excellent price/performance ratio in a rugged and pocket-sized housing for straightforward use in the field. Mainly used to measure optical power level (dBm) in premises, telco, or CATV fiber optic networks, they also can be combined with LED (OLS-34/OLS-36) or laser light sources (OLS-35/OLS-36) for insertion loss measurement.
- Extra long battery lifetime (>200 hours).
- 3-years calibration period
- Universal optical interface for all 2.5 mm / 1.25 mm connector
- Individually settable wavelengths per 1 nm step
- Micro USB interface for power supply or data transfer
- Can be part of the SmartPocket Optical Test Kits

### **Optical Time Domain Reflectometer (OTDR)**

**JDSU** E4123MM Multimode 850/1300 OTDR Module



The OTDR plug-in modules together with the MTS-4000 family of products provide a rugged, battery-operated handheld test solution. The large display combined with a comprehensive user interface make it the ideal OTDR to respond to any test scenario.

850/1300nm at 27/25 dB, 0.8m event dead zone, 4m attenuation dead zone, LAN/Enterprise multimode network qualification.

Works in conjunction with the MTS-4000

## 🔷 **JDSU** E4146QUAD

#### Multimode / Singlemode 850/1300/1310/1550 NM 0TDR



In today's demanding communications market, test solutions must be even more cost-effective, must increase productivity, and must reduce the complexity of field testing. The JDSU Multimode (MM)/Single-mode (SM) Optical Time Domain Reflectometer (OTDR) Modules offer unmatched test functionality specifically developed in response to emerging industry demands.

The MM/SM OTDR module is an all-in-one field test instrument that integrates flexible configuration options and offers multiple wavelength test capabilities.

850/1300/1310 and 1550nm at 27/25/37 and 35 dB LAN/Enterprise/Access/Metro universal test solution for both multimode and singlemode networks.

Works in conjunction with the MTS-4000

## SB111SRL EB111SRL

#### Short Range LAN 24dB Multimode 850nm OTDR plug-in



In today's telecommunications market, test solutions must be cost-effective, increase productivity, and reduce the complexity of field testing. The JDSU Short Range LAN (SRL) optical time domain reflectometer (OTDR) module offers a high-performance test functionality that has been specifically developed in response to these industry demands

Short Range LAN 850nm at 24dB, 0.5m event dead zone, 2m attenuation dead zone

Works in conjunction with MTS-6000/6000A and 8000

## SB123SRL

### Short Range LAN 24/24dB Multimode 850/1300 nm OTDR plug-in



- Field interchangeable single slot size.
- Unique automated bi-directional OTDR testing.
- Simple for the novice, fully featured for the expert.
- Short Range LAN 850/1300nm at 24/24dB, 0.5m event dead zone, 2m attenuation dead zone

Works in conjunction with MTS-6000/6000A and 8000

### **Probe Microscopes and Displays**

### **JDSU** FIT-S105-AU-PRO FIBER ESSENTIALS TOOL KIT – AU



Package includes main inspection microscope with patch cord microscope and power meter, consolidated with visual fault locater packaged into a convenient rubber enclosure to maximise ease and speed of use.

- Inspect both sides of fiber interconnect, and accurately test and measure optical power with
  one device
- Integrated functions and features eliminate switching between multiple devices
- Input for FBP series probe microscope and a dedicated patch cord microscope (HP3-60-P4) lets users guickly and easily inspect both sides of fiber interconnects
- 1.8 inch TFT LCD to view clear, crisp, detailed images of fiber end faces with optimal resolution

• Integrated power meter (OLP-6) for all single-mode and multimode applications, such as LAN, TELECOM, CATV, and DWDM testing

- Modulation frequency detection lets users identify individual fibers
- Three-year calibration period
- TWINtest and Auto- $\lambda$  (with JDSU optical light source)

### Software

## SIDSU EOFS100

#### **Optical Fiber Trace Software**



OFS-100 Optical Fibre Trace Software is an intuitive Windows based software package for post processing of optical time domain reflectometer (OTDR), polarization mode dispersion (PMD), chromatic dispersion (CD), optical spectrum analysis (OSA) and optical return loss (ORL) measurements in an office environment. JDSU OFS-100 Optical Fibre Trace Software enables fast and effective post analysis of the test results carried out in the field. It allows results documentation and customisation for report generation.

- Automatic OTDR, DWDM, PMD, and CD trace analysis.
- Reflectance and optical return loss measurements.
- Bi-directional analysis and multiple trace analysis.
- Graphical zoom and offset functions.
- Macro function for custom batch processes.

#### For troubleshooting and analysis of fiber test results

### **Visual Fault Locators**



The visual fault locator (VFL) is an essential tool that quickly and easily locates problem areas in fiber cables. By pinpointing the exact location of fiber damage, technicians can diagnose, troubleshoot, and fix the problem efficiently.

- · Compact, ergonomic design for ultimate portability
- Visible wavelength is 650 nm •
- High powered laser (1 mW) for single-mode (> 7 km) and multi-mode (> 5 km) connectors
- Continuous or Flash illumination •
- ٠ Universal connector interface for quick and easy connection ٠
- 2.5 mm connector input (1.25 mm adapter available) •
  - Includes soft-sided carrying case with belt loop

Also available in pocket size unit

# Product Offering

#### Analysers

Audio Analysers EMC Test Equipment Impedance Analysers Network Analysers < 10GHz Network Analysers > 10GHz Spectrum Analysers < 1GHz Spectrum Analysers > 13GHz Spectrum Analysers 1GHz - 3GHz Spectrum Analysers 3GHz - 13GHz Vector Signal Analysers Waveform & Distortion Analysers

#### **Communications Test**

Bit Error Rate Test Sets (BER, BERT, BERTS) Cable Locators Circuit Transmission Test Sets Fibre Channel Protocol Analysers **Fibre Switches Fusion Splicers ISDN Test Sets** LAN Cable Testers (CAT 5, CAT 6) Multiple Application Platform **Optical Light Sources Optical Loss Kits Optical Power Meters Optical Spectrum Analysers** OTDR Protocol, LAN & WAN Analyser Test Sets Selective Level Meters SONET / SDH Test Sets T-Carrier / PDH Test Sets **USB** Protocol Analysers

#### Counters

**Microwave Counters** Modulation Domain Analysers Universal and Multi-function Counters

#### **Electrical & Industrial Test**

Battery Test Equipment Cable Locator & Fault Finder Circuit Breaker Test Sets Environmental Test Chamber Ground-Resistance Testers High-Potential Testers (Hipot) Infrared Imagers Insulation-Resistance Testers Low-Resistance Ohmmeters **Oil-Test Equipment** Power Factor Test Sets Power Quality / Power Demand Analysers **Power Recorders** Protective Relay Test Sets Transformer Testers

#### General Purpose Test

Detectors, Directional Couplers, Power Spli Fixed Attenuators, Variable Attenuators General Purpose Amplifiers **Microwave Amplifiers** VXI Test Equipment

#### Generators

Data Generators **Digital Vector Generators** Function Generators & Arbitrary Waveform Pulse Generators Signal Generators < 6GHz Signal Generators > 6GHz Sweep Generators

#### Logic Analysers

Digital Oscilloscopes < 2 GHz Logic Analysers- Portable / Stand Alone

#### Meters

**Digital Multimeters** LCR Meters & Resistance Meters Modulation Meters Noise Figure Meters & Noise Sources Power Meters & Power Sensors Sound Level Meters

#### Oscilloscopes

Analog Oscilloscopes Digital Oscilloscopes < 2 GHz Digital Oscilloscopes > 6 GHz Digital Oscilloscopes 2GHz - 6GHz Probes Sampling Scopes & Plug-Ins

#### **Power Sources**

AC Power Supplies & Amplifiers AC/DC Calibrators **Battery Chargers Bipolar Power supplies** DC Power Supplies & Loads

#### Recorders

Data Acquisition Systems Instrumentation Tape Recorders Power Recorders Strip Chart Recorders

#### **Television Test**

Cable Plant Sweep Equipment Measurement Sets Picture Quality Analysers Video & Audio Generators & Analysers Waveform Monitors

#### Wireless Test

Drive Test Equipment SiteMasters / Antennas / Base Station Test Wireless Appliance (Handset) Test









## HMO3524 Oscilloscope HAEFELY

HAMEG

**ECOMPACT 4 Immunity Tester** 

ROHDE & SCHWARZ FSH3 Spectrum Analyser

JDSU 4000 OTDR