



DSX-5000 CableAnalyzer™

Overview

The DSX-5000 CableAnalyzer improves the efficiency of copper certification with unmatched speed for testing Cat 6A and Class F_A while meeting draft IEC Level V – the most stringent accuracy requirement. The ProjX Management System helps ensure jobs are done correctly the first time and helps track progress from set-up to systems acceptance. Versiv platform supports modules for fiber testing (Both OLTS and OTDR) and Wi-Fi Analysis and Ethernet troubleshooting. The platform is easily upgradeable to support future standards. Troubleshoot faults faster with the Taptive user interface which graphically displays the source of failures including crosstalk, return loss and shield faults. Analyze test results and create professional test reports using LinkWare™ Management Software.

Fluke Networks' DSX-5000 CableAnalyzer is Intertek (ETL) Verified in accordance with the IEC-61935-1 specifications for accuracy Level IV, and draft accuracy Level V, and in accordance with the ANSI/TIA-1152 specifications for Level IIIc.

Features

» Unique Features

» Standards

» Performance

» ProjX™ Management System

» Taptive™ User Interface

» LinkWare™ Management Software

Models & Accessories

Models

Model Number/Name	Description
DSX-5000 Gold Support »	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStrap, (2) Shoulder Straps, Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, Statement of Calibration and Getting Started Guide. See Photo
DSX-5000 120/GLD	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStrap, (2) Shoulder Straps, Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, Statement of Calibration and Getting Started Guide with 1 year of Gold Support coverage (available in the United States, Europe and Japan only. Europe order: DSX-5000 INTL/GLD, Japan order: DSX-5000 AP/GLD).
DSX-5000Qi Gold Support »	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer Modules, (2) CertiFiber Quad OLTS Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) Handstraps, (2) Shoulder Straps, Large Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, USB Video Inspection Probe w/ 4 Tips, (2) OneClick Cleaner (1.25/2.50 mm), (2) LC/LC Simplex Adaptors, SC/LC EF-Compliant MM TRC Kit 50 µm, SC/LC SM TRC Kit, TRC Carry Case, Statement of Calibration and Getting Started Guides. See Photo
DSX-5000Qi 120/GLD	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer Modules, (2) CertiFiber Quad OLTS Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) Handstraps, (2) Shoulder Straps, Large Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, USB Video Inspection Probe w/ 4 Tips, (2) OneClick Cleaner (1.25/2.50 mm), (2) LC/LC Simplex Adaptors, SC/LC EF-Compliant MM TRC Kit 50 µm, SC/LC SM TRC Kit, TRC Carry Case, Statement of Calibration and Getting Started Guides with 1 year of Gold Support coverage (available in the United States, Europe and Japan only. Europe order: DSX-5000QiINTL/GLD, Japan order: DSX-5000Qi AP/GLD) .
DSX-5000QOi Gold Support »	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer modules, (2) CertiFiber Quad OLTS modules, OptiFiber Quad OTDR module, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Hardsided Carry Case, Large Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, (2) OneClick cleaner (1.25/2.50 mm), SC/SC Simplex adaptors, 2 SC/LC Multimode Launch Cables—50 µm, 2 SC/LC Singlemode Launch Cable—9 µm, USB Fiber Inspection Video Probe with 4 Tips, (2) LC/LC Simplex Adaptor, SC/LC EF-Compliant MM TRC Kit 50 µm, SC/LC SM TRC Kit, TRC Carry Case, Statement of Calibration and Operator's Manual Getting Started Guides. See Photo
DSX-5000QOi120/GLD	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer modules, (2) CertiFiber Quad OLTS modules, OptiFiber Quad OTDR module, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Hardsided Carry Case, Large Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, (2) OneClick cleaner (1.25/2.50 mm), SC/SC Simplex adaptors, 2 SC/LC Multimode Launch Cables—50 µm, 2 SC/LC Singlemode Launch Cable—9 µm, USB Fiber Inspection Video Probe with 4 Tips, (2) LC/LC Simplex Adaptor, SC/LC EF-Compliant MM TRC Kit 50 µm, SC/LC SM TRC Kit, TRC Carry Case, Statement of Calibration and Operator's Manual Getting Started Guides with 1 year of Gold Support coverage (available in the United States, Europe and Japan only. Europe order: DSX-5000QOiINTLGLD, Japan order: DSX-5000QOi AP/GLD).
DSX-5000Mi Gold Support »	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer™ Modules, (2) CertiFiber Multimode MM OLTS Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Large See Photo
DSX-5000Mi 120/GLD	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer™ Modules, (2) CertiFiber Multimode MM OLTS Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Large with 1 year of Gold Support coverage (available in the United States, Europe and Japan only. Europe order: DSX-5000MiINTL/GLD, Japan order: DSX-5000Mi AP/GLD).
DSX-5000NTB Gold Support »	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer Modules, (2) CertiFiber® Quad OLTS Modules, OptiFiber® Quad OTDR Module, OneTouch AT Module, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Hardsided Carry Case, Large Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, OneTouch AT Resource DVD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, (2) OneClick Cleaner (1.25/2.50 mm), SC/SC Simplex Adaptors, 2 SC/LC Multimode Launch Cables—50 µm, 2 SC/LC Singlemode Launch Cable—9 µm, USB Fiber Inspection Video Probe with 4 Tips, TPAK Fiber Hanging Kit, (2) LC/LC Simplex Adaptor, SC/LC EF-compliant MM TRC Kit 50 µm, SC/LC SM TRC Kit, TRC Carry Case, WireView Cable Ids #1 - #6, RJ45 Patch Cable, External Directional Antenna with Mounting Clip, SD Card, USB SD Card Reader, USB Flash Drive, Two 1000BASE-SX SFP Fiber Transceivers, Statement of Calibration, and Getting Started Guide. Note: OneTouch AT Network Assistant models with Wi-Fi features (802.11) are regulated test instruments and are approved for shipment and sale into these countries only . See Photo
	1 Versiv Mainframe & Remote, (2) DSX-5000 CableAnalyzer Modules, (2) CertiFiber® Quad OLTS Modules, OptiFiber® Quad OTDR Module, OneTouch AT Module, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Hardsided Carry Case, Large Carry Case, USB Interface Cable, LinkWare Software CD, AxTalk Software CD, User Manual CD, OneTouch AT Resource DVD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, (2) OneClick Cleaner (1.25/2.50 mm), SC/SC Simplex Adaptors, 2 SC/LC Multimode Launch Cables—50 µm, 2 SC/LC Singlemode Launch Cable—9 µm, USB

DSX-5000NTB120/GLD	Fiber Inspection Video Probe with 4 Tips, TPAK Fiber Hanging Kit, (2) LC/LC Simplex Adaptor, SC/LC EF-compliant MM TRC Kit 50 μ m, SC/LC SM TRC Kit, TRC Carry Case, WireView Cable Ids #1 - #6, RJ45 Patch Cable, External Directional Antenna with Mounting Clip, SD Card, USB SD Card Reader, USB Flash Drive, Two 1000BASE-SX SFP Fiber Transceivers, Statement of Calibration, and Getting Started Guide with 1 year of Gold Support coverage (available in the United States, Europe and Japan only. Europe order: DSX-5000NTB/INTLGLD, Japan order: DSX-5000NTB AP/GLD).
DSX-ADD-R Gold Support »	1 Versiv Remote, (2) DSX-5000 CableAnalyzer Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Carry Case, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, Statement of Calibration and Getting Started Guide See Photo
DSX-CFP-Q-ADD-R Gold Support »	1 Versiv Remote, (2) DSX-5000 CableAnalyzer modules, (2) CertiFiber Quad OLTS Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Large Carry Case, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, (2) LC/LC Simplex Adaptors, SC/LC EF-compliant MM TRC Kit 50 μ m, SC/LC SM TRC Kit, TRC Carry Case, Statement of Calibration and Getting Started Guide See Photo
DSX-OPF-Q-ADD Gold Support »	(2) DSX-5000 CableAnalyzer Modules, OptiFiber Quad OTDR Module, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, Large Carry case, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, SC/SC Simplex Adaptors, 2 SC/LC Multimode Launch Cables—50 μ m, 2 SC/LC Singlemode Launch Cables—9 μ m, TPAK Fiber Hanging Kit, SC/SC Simplex Adaptor, LC/LC Simplex Adaptor, Statement of Calibration and Getting Started Guides See Photo
DSX-ADD Gold Support »	(2) DSX-5000 CableAnalyzer Modules, Set of CAT 6A/Class EA Permanent Link Adaptors, Set of CAT 6A/Class EA Channel Adaptors, (2) Headsets, (2) HandStraps, (2) Shoulder Straps, Carry Case, AxTalk Software CD, User Manual CD, (2) AC Chargers, (2) Universal Couplers, (2) AxTalk Terminators, Statement of Calibration and Getting Started Guide See Photo

Accessories

Model Number/Name	Description
DSX-PLA004S	DSX CAT 6A/CLASS EA PLA SET See Photo
DSX-PLA011S	DSX TERA CAT 7A/CLASS FA PLA SET See Photo
DSX-CHA004S	DSX CAT 6A/CLASS EA CHA SET See Photo
DSX-CHA011S	DSX TERA Cat 7A/CLASS FA CHA SET See Photo
DSX-TERA-KIT	DSX TERA CAT 7A/CLASS FA PLA & CHA KIT
DSX-PC5ES	DSX Patch Cord Test Adapter Set for Category 5e patch cords See Photo
DSX-PC6S	DSX Patch Cord Test Adapter Set for Category 6 patch cords See Photo
DSX-PC6AS	DSX Patch Cord Test Adapter Set for Category 6A patch cords
DSX-5000 Mod	1 GHZ DSX Replacement MODULE
VERSIV-M	Versiv Main Replacement
VERSIV-RU	Versiv Remote Replacement
VERSIV-TSET	Versiv Headphones See Photo
VERSIV-CASE2	Versiv Large Carry Case
VERSIV-CASE3	Versiv Hardsided Case
VERSIV-BATTERY	Versiv Battery See Photo
VERSIV-ACUN	Versiv Charger See Photo
VERSIV-STRP	Versiv Strap Kit See Photo
VERSIV-STND	Versiv Demo Stand
DSX-REFMOD	DSX SET-REF MODULE

Specifications

Cable Types

Shielded and unshielded pair LAN cabling

TIA Category 3, 4, 5, 5e, 6, 6A: 100 Ω
ISO/IEC Class C, D, E, E_A, F, and F_A: 100 Ω and 120 Ω

Standard Link Interface Adapters

Permanent link adapters

Plug type: shielded RJ45
Optional Plug type: Tera

Channel Adapters

Jack type: shielded RJ45
Optional Jack type: Tera

Test Standards

TIA

Category 3, 4, 5, 5e, 6, 6A per TIA 568-C.2

ISO/IEC

Class C and D, E, E_A, F, F_A certification per ISO/IEC 11801:2002 and amendments

Maximum frequency

1200 MHz

General Specifications

Speed of Autotest	Full 2-way Autotest of Category 5e or 6/Class D or E: 9 seconds . Full 2-way Autotest of Category 6A/Class E _A : 10 seconds
Support test parameters (The selected test standard determines the test parameters and the frequency range of the tests)	Wire Map, Length, Propagation Delay, Delay Skew, DC Loop Resistance, Insertion Loss (Attenuation), Return Loss (RL), NEXT, Attenuation-to-crosstalk Ratio (ACR-N), ACR-F (ELFEXT), Power Sum ACR-F (ELFEXT), Power Sum NEXT, Power Sum ACR-N, Power Sum Alien Near End Xtalk (PS ANEXT), Power Sum Alien Attenuation Xtalk Ratio Far End (PS AACR-F)
Input protection	Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage
Display	5.7 in LCD display with a projected capacitance touchscreen
Case	High impact plastic with shock absorbing overmold
Dimensions	Main Versiv unit with DSX-5000 module and battery installed: 2.625 in x 5.25 in x 11.0 in (6.67 cm x 13.33 cm x 27.94 cm)
Weight	Main Versiv unit with DSX-5000 module and battery installed: 3 lbs, 5oz (1.28 kg)
Main unit and remote:	Lithium ion battery pack, 7.2 V
Typical battery life:	8 hours
Charge time*	Tester off: 4 hours to charge from 10 % capacity to 90 % capacity.
Languages supported	English, French, German, Spanish, Portuguese, Italian, Japanese, and Simplified Chinese
Calibration	Service center calibration period is 1 year

Environment Specifications

Operating Temperature	32°F to 113°F (0°C to 45°C)
Storage Temperature	-4°F to +122°F (-20° C to +50°C)
Operating relative humidity	0 % to 90 %, 32°F to 95 °F (0°C to 35°C) 0 % to 70 %, 95°F to 113 °F (35°C to 45°C)
Vibration	Random, 2 g, 5 Hz-500 Hz
Shock	1 m drop test with and without module and adapter
Safety	CSA 22.2 No. 61010, IEC 61010-1 2nd Edition + Amendments 1, 2
Operating altitude	13,123 ft (4,000 m)
EMC	EN 61326-1

Performance Specifications **

Category 6A/Class E _A test modes (or lower link categories)	DSX-5000 CableAnalyzer modules exceed with Level III requirements of TIA 1152 and Level IV of IEC 61935-1.
Class F _A test modes	DSX-5000 CableAnalyzer modules exceed Level V requirements as in the draft 4th edition of IEC 61935-1.

Length of Twisted Pair Cabling¹

	Without Remote	With Remote
Range	800 m (2600 ft)	150 m (490 ft)
Resolution	0.1 m or 1 ft	0.1 m or 1 ft
Accuracy	± (0.3 m + 2 %); 0 m to 150 m ± (0.3 m + 4 %); 150 m to 800 m	± (0.3 m + 2 %)

Propagation Delay

	Without Remote	With Remote
Range	4000 ns	750 ns
Resolution	1 ns	1 ns
Accuracy	± (2 ns + 2 %); 0 ns to 750 ns ± (2 ns + 4 %); 750 ns to 4000 ns	± (2 ns + 2 %)

Delay Skew

Range	0 ns to 100 ns
Resolution	1 ns
Accuracy	± 10 ns

DC Loop Resistance Test

Range	0 Ω to 540 Ω
Resolution	0.1 Ω
Accuracy	± (1 Ω + 1 %)
Overload recovery time	Less than 10 minutes to rated accuracy following an overvoltage. Referencing is required after repeated or prolonged overvoltage.