

Datasheet: DSX CableAnalyzer™ Series

The **DSX CableAnalyzer™ Series** is the copper certification solution of the Versiv™ cabling certification product family. The DSX Series includes the DSX-8000, which can certify cabling up to Cat 8 / 2 GHz, and the DSX-5000 which can certify up to Cat 6A / Class F_A / 1GHz. The Versiv line also includes **fiber OLTS certification**, **OTDR**, and **fiber inspection** modules. Versiv reduces overall certification costs by up to 2/3, adding up to 10% to the bottom line of every job. While the fastest test time (8 seconds for Cat 6A) plays a part, the system is designed from the ground up to reduce errors and streamline certification. Full integration with the **LinkWare Live cloud service** lets the Project Manager remotely set up the testers, monitor job progress and even locate tester from any smart device.

With the DSX CableAnalyzer and Versiv, you'll save money every time you use it.



The DSX CableAnalyzer Series copper test solution enables testing and certification of twisted pair cabling for up to 40 Gigabit Ethernet deployments and will handle any cabling system whether it is a Cat 5e, 6, 6A, 8 or Class F_A and I/II. Certifying a cable is one part of a process that starts with system design and ends with system acceptance. The faster that process goes, the more profitable you'll be. Unfortunately, there are a lot of things that slow the process down – setting up the tester incorrectly, testing to the wrong limits, waiting for skilled technicians to analyze and troubleshoot failures, misinterpretation of results, and producing test reports that customers cannot understand.

As part of the **Versiv cabling certification** product family, the DSX CableAnalyzer Series provides accurate, error-free certification. In the installation business there are multiple teams, varying media types and multiple testing requirements. The difference between being profitable or not is just a few percentage points. The DSX certifies copper cabling, complies with all standards including Level VI/2G accuracy, making jobs easier to manage, and getting to system acceptance faster. It's not just for the expert technicians and Project Managers. Individuals of various skill levels can improve the set-up, operation, test reporting, and simultaneously manage diverse projects.



Unique features:

- Versiv enables users to accomplish more than ever with a cable tester, by accelerating every step of the testing process
- LinkWare Live cloud service lets the Project Manager remotely set up the testers, monitor job progress and even locate tester from any smart device
- ProjX™ management system eases tasks from initial set-up of a job to system acceptance. It eliminates redundant steps, and ensures that all tests are completed correctly the first time, and every time
- Taptive™ user interface puts advanced data analysis and easy set-up and operation at the fingertips of technicians of all skill levels
- LinkWare PC management software provides unmatched analysis of test results and professional test reports
- The DSX reduces the time required to fix cabling faults with dedicated diagnostics, a simple test that locates the problem



Performance:

- Eight second Cat 6A test time contributes to the fastest way to gain certification
- Graphically displays the source of failures including crosstalk and distance to shield faults for faster troubleshooting
- Manage up to 12,000 Cat 6A test results with full graphics
- Capacitive touchscreen allows quick tester setup with easily selectable cable types, standards and testing parameters
- Over 1 billion links reported on LinkWare PC management software
- Integrated Wi-Fi allows you to easily upload results to LinkWare™ Live

Standards:

- Compliant with ANSI/TIA-1152-A Level 2G and proposed standard IEC 61935-1 Ed. 5 Level VI field tester accuracy requirements to 2000 MHz
- Supports the complete suite of Resistance Unbalance standards needed for Power over Ethernet (PoE) – IEEE 802.3bt, ANSI/TIA/EIA-568, ISO/IEC 11801 series documents
- TCL and ELTCTL measurements compliant to IEC 61935-1-1 (Draft)
- Screen continuity along path of cabling

DSX CableAnalyzer Series Family

The DSX CableAnalyzer Series family is based on two modules: the DSX2-5000 and DSX2-8000. The DSX2-5000 certifies twisted pair Cat 5e, 6, 6A and Class F_A cabling with limits up to 1000 MHz. The DSX2-8000 certifies twisted pair Cat 5e, 6, 6A, **Cat 8** and Class I/II cabling with limits up to 2000 MHz.

	Copper Certification	
	DSX-8000 CableAnalyzer™	DSX-5000 CableAnalyzer™
Cat 6A / Class E _A test time	8 seconds	10 seconds
Cat 8 / Class I/II test time	16 seconds	
HDTDX/HDTDR diagnostic test times	≈ 3 seconds	≈ 3 seconds
Internal memory	≈ 5,000 Cat 8 with plots; ≈ 12,000 Cat 6A with plots	≈ 12,000 Cat 6A with plots
>Level V Accuracy (1 GHz)	✓	✓
Level VI/2G Accuracy (2 GHz)	✓	
Resistance Unbalance measurement	✓	✓
Shield integrity check and distance to fault	✓	✓
TCL measurement	✓	✓
ELTCTL measurement	✓	✓
CDNEXT measurement	✓	✓
CMRL measurement	✓	✓
Built-in Alien XTalk capability	✓	✓
Channel Adapter	2 GHz Range	1 GHz Range
Permanent Link Adapter	2 GHz Range	1 GHz Range
Optional accessories		
Patch cord adapter	Cat 5e, 6 and 6A patch cord	at 5e, 6 and 6A patch cord
Coax Adapter	✓	✓
M12 Adapter	✓	✓
TERA Adapter	Coming Q2 2018	✓
GG45 Adapter	Coming Q2 2018	✓

DSX CableAnalyzer Series Specifications

Cable Types	
Shielded and unshielded pair LAN cabling	TIA Cat 3, 4, 5, 5e, 6, 6A, 8: 100 Ω ISO/IEC Class C, D, E, E _A , F, F _A and I/II: 100 Ω and 120 Ω
Standard Link Interface Adapters	
Permanent link adapters	Plug type: shielded RJ45
	Optional Plug type: Tera (for DSX-5000 only, DSX-8000 version available Q1 2018)
Channel Adapters	Jack type: shielded RJ45
	Optional Jack type: Tera, GG45 (for DSX-5000 only, DSX-8000 version available Q1 2018)
Test Standards	
TIA	Cat 3, 4, 5, 5e, 6, 6A, 8 per TIA 568 Series
ISO/IEC	Class C, D, E, E _A , F, F _A , I/II certification per ISO/IEC 11801 Series
Maximum frequency	DSX-8000: 2000 MHz; DSX-5000 1000 MHz
General Specifications	
Autotest Time	DSX-8000: Full 2-way Autotest of Cat 5e or 6/Class D or E: 7 seconds Full 2-way Autotest of Cat 6A/Class EA: 8 seconds Full 2-way Autotest of Cat 8: 16 seconds DSX-5000: Full 2-way Autotest of Cat 5e or 6/Class D or E: 9 seconds Full 2-way Autotest of Cat 6A/Class EA: 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 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 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, Italian, Japanese, Portuguese, Spanish, Chinese, Korean, Russian, Trad Chinese, Czech, Polish, Swedish, Hungarian
Calibration	Service center calibration period is 1 year
Integrated Wi-Fi	Meets IEEE 802.11 a/b/g/n; dual band (2.4 GHz and 5 GHz)

Environmental Specifications

Operating Temperature	32° F to 113° F (0° C to 45° C)
Storage Temperature	-22° F to +140° F (-30° C to +60° C)
Operating relative humidity (% RH without condensation)	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 3rd Edition
Operating altitude	13,123 ft (4,000 m) 10,500 ft (3,200 m) with ac adapter
EMC	EN 61326-1

Ordering Information	
DSX2-8000 Wireless models	
Model	Description
DSX2-8000	2GHZ DSX-8000 CableAnalyzer with Wi-Fi
DSX2-8000/GLD	2GHZ DSX-8000 CableAnalyzer with Wi-Fi and 1 YR Gold Support
DSX2-8000MI	2GHZ DSX-8000 CableAnalyzer with Multimode OLTS, Fiber Inspection and Wi-Fi
DSX2-8000MI/GLD	2GHZ DSX-8000 CableAnalyzer with Multimode OLTS, Fiber Inspection, Wi-Fi and 1 YR Gold Support
DSX2-8000QI	2GHZ DSX-8000 CableAnalyzer with Quad OLTS, Fiber Inspection and Wi-Fi
DSX2-8000QI/GLD	2GHZ DSX-8000 CableAnalyzer with Quad OLTS, Fiber Inspection, Wi-Fi and 1 YR Gold Support
DSX2-8000QOI	2GHZ DSX-8000 CableAnalyzer with Quad OLTS, Quad OTDR, Fiber Inspection and Wi-Fi
DSX2-8000QOI/GLD	2GHZ DSX-8000 CableAnalyzer with Quad OLTS, Quad OTDR, Fiber Inspection, Wi-Fi and 1 YR Gold Support
DSX2-8000-PRO	Versiv Professional Kit with DSX-8000 CableAnalyzer, Quad OLTS, Quad OTDR, Fiber Inspection, Wi-Fi and a full complement of product accessories.
DSX2-8000-PRO/GLD	Versiv Professional Kit with DSX-8000 CableAnalyzer, Quad OLTS, Quad OTDR, Fiber Inspection, Wi-Fi and a full complement of product accessories and 1 YR Gold Support.

DSX2-8000 Non-Wireless models	
Model	Description
DSX2-8000-NW	2GHZ DSX-8000 CableAnalyzer

DSX2-8000 Accessories	
Model	Description
DSX-8000-ADD	DSX-8000 Add-on Kit
DSX2-8000-ADD-R	DSX2-8000 Add-on Kit with Remote (not compatible with original Versiv main)
DSX2-8-CFP-Q-ADD/R	DSX2-8000 with Quad OLTS Add-on Kit with V2 Remote (not compatible with original Versiv main)
DSX-8000-OPF-Q-ADD	DSX-8000 with Quad OTD Add-on Kit
DSX-PLA804S	DSX-8000 Cat 8/Class I Permanent Link Adapter Set
DSX-CHA804S	DSX-8000 Cat 8/Class I Channel Adapter Set

DSX-8000 Gold Support models	
Model	Description
GLD-DSX-8000	1 year Gold Support, DSX2-8000 or DSX-8000
GLD3-DSX-8000	3 year Gold Support, DSX2-8000 or DSX-8000
GLD-DSX-8000MI	1 year Gold Support, DSX2-8000MI or DSX-8000MI
GLD3-DSX-8000MI	3 year Gold Support, DSX2-8000MI or DSX-8000MI
GLD-DSX-8000QI	1 year Gold Support, DSX2-8000QI or DSX-8000QI
GLD-DSX-8000QOI	1 year Gold Support, DSX2-8000QOI or DSX-8000QOI
GLD3-DSX-8000QOI	3 year Gold Support, DSX2-8000QOI or DSX-8000QOI
GLD-DSX-8000PRO	1 year Gold Support, DSX2-8000-PRO or DSX-8000-PRO
GLD3-DSX-8000PRO	3 year Gold Support, DSX2-8000-PRO or DSX-8000-PRO
GLD-DSX-8-ADD-R	1 year Gold Support, DSX2-8-ADD-R or DSX-8000-ADD-R
GLD3-DSX-8-ADD-R	3 year Gold Support, DSX2-8-ADD-R or DSX-8000-ADD-R
GLD-DSX8-CFPQADDR	1 year Gold Support, DSX2-8-CFP-Q-ADD/R or DSX-8-CFP-Q-ADD/R
GLD3-DSX8-CFPQADDR	3 year Gold Support, DSX2-8-CFP-Q-ADD/R or DSX-8-CFP-Q-ADD/R