

# Datasheet: DSX CableAnalyzer™ Series

## 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 CableAnalyer 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<sup>™</sup> 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

#### 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 DSX-5000 and DSX-8000. The DSX-5000 certifies twisted pair Cat 5e, 6, 6A and Class  $F_A$  cabling with limits up to 1000 MHz. The DSX-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 <sub>A</sub> 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	✓	<b>✓</b>
Shield integrity check and distance to fault	✓	✓
TCL measurement	✓	✓
ELTCTL measurement	✓	<b>✓</b>
CDNEXT measurement	✓	<b>✓</b>
CMRL measurement	✓	<b>√</b>
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	Cat 5e, 6 and 6A patch core
Coax Adapter	✓	✓
M12 Adapter	✓	✓
TERA Adapter	Available Summer 2017	✓
GG45 Adapter	Available Summer 2017	<b>✓</b>



## **DSX CableAnalyzer Series Specifications**

Cable Types	
Shielded and unshielded pair LAN cabling	TIA Cat 3, 4, 5, 5e, 6, 6A, 8: 100 $\Omega$ ISO/IEC Class C, D, E, E <sub>A</sub> , F, F <sub>A</sub> and I/II: 100 $\Omega$ and 120 $\Omega$

Standard Link Interface Adapters	
Permanent link adapters	Plug type: shielded RJ45
	Optional Plug type: Tera (for DSX-5000 only, DSX-8000 version available summer 2017)
Channel Adapters	Jack type: shielded RJ45
	Optional Jack type: Tera, GG45 (for DSX-5000 only, DSX-8000 version available summer 2017)

Test Standards		
TIA	Cat 3, 4, 5, 5e, 6, 6A, 8 per TIA 568 Series	
ISO/IEC	Class C, D, E, E <sub>A</sub> , F, F <sub>A</sub> , 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 show 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	



Ordering Information  DSX-8000 Wireless models (Available in the following countries: www.flukenetworks.com/VersivWiFiAdapter)		
DSX-8000-W	DSX-8000 CableAnalyzer with WiFi adapter	
DSX-8000-W/GLD	DSX-8000 CableAnalyzer with WiFi adapter and 1 year Gold Support	
DSX-8000MI-W	DSX-8000 with Multimode OLTS and Fiber Inspection with WiFi adapter	
DSX-8000MI-W/GLD	DSX-8000 with Multimode OLTS and Fiber Inspection with WiFi adapter and 1 year Gold Support	
DSX-8000OI-W	DSX-8000 with Quad OTDR and Fiber Inspection with WiFi adapter	
DSX-8000OI-W/GLD	DSX-8000 with Quad OTDR and Fiber Inspection with WiFi adapter and 1 year Gold Support	
DSX-8000QI-W	DSX-8000 with Quad OLTS and Fiber Inspection with WiFi adapter	
DSX-8000QI-W/GLD	DSX-8000 with Quad OLTS and Fiber Inspection with WiFi adapter and 1 year Gold Support	
DSX-8000QOI-W	DSX-8000 with Quad OLTS, Quad OTDR and Fiber Inspection with WiFi adapter	
DSX-8000QOI-W/GLD	DSX-8000 with Quad OLTS, Quad OTDR and Fiber Inspection with WiFi adapter and 1 year Gold Support	
DSX-8000-PRO-W	Versiv Professional Kit with DSX-8000 CableAnalyzer, Quad OLTS, Quad OTDR, Fiber Inspection with WiFi adapter and a full complement of product accessories.	
DSX-8000-PRO-W/GLD	Versiv Professional Kit with DSX-8000 CableAnalyzer, Quad OLTS, Quad OTDR, Fiber Inspection with WiFi adapter and a full complement of product accessories and 1 year Gold Support.	

DSX-8000 Non-wireless models	
Model	Description
DSX-8000	DSX-8000 CableAnalyzer
DSX-8000MI	DSX-8000 with Multimode OLTS and Fiber Inspection
DSX-8000OI	DSX-8000 with Quad OTDR and Fiber Inspection
DSX-8000QI	DSX-8000 with Quad OLTS and Fiber Inspection
DSX-8000QOI	DSX-8000 with Quad OLTS, Quad OTDR and Fiber Inspection
DSX-8000-PRO	Versiv Professional Kit with DSX-8000 CableAnalyzer, Quad OLTS, Quad OTDR, Fiber Inspection and a full complement of product accessories.

DSX-8000 Accessories		
Model	Description	
DSX-8000-ADD	DSX-8000 Add-on Kit	
DSX-8000-ADD-R	DSX-8000 Add-on Kit with Remote	
DSX-8-CFP-Q-ADD/R	DSX-8000 with Quad OLTS Add-on Kit with Remote	
DSX-8000-OFP-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	