



### **DSX-8000 Frequently Asked Questions**

### 1. Why is the DSX-8000 the first "real" Cat 8 field tester?

There are four "firsts" for the DSX-8000 that make it a "real" Cat 8 field tester

- The first Permanent Link and Channel adapters with a full 2 GHz range. Other testers can measure up to 2 GHz, but do not have the required adapters. To test a Cat 8 link, other testers must cut off the Cat 8 connector and test the bare wires with a lab adapter. This is not a true field test and is of no use to a contractor.
- The first tester to be endorsed by a Cat 8 cabling manufacturer. One of the main reasons for certifying installed cabling is to obtain a manufacturer's warranty. Without their endorsement, the certification is of no use of this purpose.
- The first tester independently verified to meet the ANSI/TIA-1152-A Level 2G requirements for measurement accuracy required for Cat 8 testers.
- The first tester (along with the DSX-5000) to test screen continuity along the path of the cabling as required for Level 2G testers

## 2. Softing claims their WireXpert Certifier, which has been on the market for years, meets Cat 8 standards. So why are we first?

As of this time, the WireXpert has no capability to test a TIA Cat 8 Channel in the field, no independent verification, or manufacturer's endorsements for installed cabling systems. They have built some specialty adapters using Class FA (GG45 or TERA) connectors for ISO Class II systems. The connectors do get used, primarily in Germany, Austria, and France, but no one to our knowledge has ever built a switch or server with a Class  $F_A$  connector so real Cat 8 channels will all terminate in RJ45 connectors – which they do not yet support.

### 3. Can the DSX-8000 test standards "below" Cat 8?

Yes, the DSX-8000 can test all copper cabling types that can be tested by the DSX-5000.

### 4. What are the test times for the DSX-8000?

The DSX-8000 is the fastest tester on the market with an eight second Cat 6A certification. Test time for Cat 8 is 16 seconds.





### 5. What is the requirement for testing "screen continuity along the path of the cabling"?

This is a requirement in ANSI/TIA-1152-A for Level 2G testers. Cat 8 is a screened system which requires the screen on the cable be connected to the shielded connectors at each end. This improves crosstalk performance, especially for Alien NEXT. Therefore, being able to verify that the screen is connected properly is essential to certifying the performance of the system. Most testers (including the DTX) use a simple DC continuity test for this verification. Unfortunately, this test can be fooled by alternative paths for the test signal, such as a common ground or screens on other cables. The DSX-5000 and 8000 use a more sophisticated method which can determine if the continuity of the screen is maintained "along the path of the cabling". It can also tell the distance to the shield fault, which greatly simplifies troubleshooting.

### 6. What other tests are performed by the DSX-8000?

The DSX CableAnalyzer Series (DSX-5000 and DSX-8000) continues to be the only field cable tester that can measure:

- Resistance Unbalance: which is important for successful PoE operation
- TCL and ELTCL balance measurements: which are important for successful 10GBase-T operation.

These tests are available to DSX users by selecting +ALL when choosing Test Limits.

### 7. Does the DSX-8000 meet ISO/IEC Class I/II requirements?

Yes, however Class II requires adapters for TERA and GG-45 type connectors. Those adapters will be available in the summer of 2017. Note that no Class II TERA or GG45 connectors are shipping at this time.

### 8. Does the DSX-8000 have the highest frequency range of any tester?

No, some testers can test to slightly higher frequencies. There are no standards in development or discussion that require these higher frequencies. Further, there is no accuracy requirement for test results above 2GHz. Test results are of no value if they are not accurate.





# 9. Will DSX-5000 adapters work with the DSX-8000? Will DSX-8000 adapters work with the DSX-5000?

The following charts show the compatibly between the two measurement modules and their adapters

DSX-8000 Adapters		Measurement Module Compatibility	
		DSX-8000	DSX-5000
DSX-PLA804	Cat 8 Permanent Link	☑	<u>12</u>
DSX-CHA804	Cat 8 Channel	Ø	<b>E</b>
TBD	TERA Class II Permanent Link	Coming Summer 2017	Z
TBD	TERA Class II Channel	Coming Summer 2017	Z
TBD	GG45 Class II Channel	Coming Summer 2017	<b>12</b>

DSX-5000 Adapters		Measurement Module Compatibility	
		DSX-8000	DSX-5000
DSX-PLA004	Cat 6A / Class E <sub>A</sub> Permanent Link	✓	☑
DSX-CHA004	Cat 6A / Class E <sub>A</sub> Channel	✓	☑
DSX-CHA021	M12 4-Position	✓	Ø
DSX-CHA003	Coax Adapter	✓	☑
DSX-PC5e	Cat 5e Patch Cord	✓	☑
DSX-PC6	Cat 6 Patch Cord	✓	☑
DSX-PC6A	Cat 6A Patch Cord	✓	Ø
DSX-PLA011	TERA Class FA Permanent Link	<u>12</u>	☑
DSX-CHA011	TERA Class F <sub>A</sub> Channel	<u>12</u>	Ø
DSX-CHA012	GG45 Class F <sub>A</sub> Channel	22	Ø





### 10. Is the DSX-8000 part of the Versiv product family? If so, does it use the same Versiv mainframe and remote as the DSX-5000 and other Versiv products?

Yes, the DSX-8000 is part of the Versiv Cable Certification Family and uses the same Mainframe and Remote as the other Versiv products (DSX-5000, CertiFiber Pro, OptiFiber Pro, and FI-7000). The Versiv family is a modular design with swappable testing modules that provide four types of testing plus report generation software and a cloud service for managing jobs.

### 11. When are Cat 8 solutions expected to ship?

As of this writing, no vendors are shipping Cat 8 cabling solutions, although Panduit and Leviton have announced and are demonstrating solutions which have been independently verified.

### 12. What's the case for Cat 8 cabling?

Cat 8 solutions are designed to support Ethernet at rates up to 40 Gbps (40GBASE-T) over distances up to 30 meters, making it a solution primarily for data centers. Copper cabling is less costly to install, but the biggest savings will be related to electronics costs. If Cat 8 / 40GBASE-T becomes widely deployed, it's expected that switch and server connections supporting it will be much less expensive than those using fiber optics.

It's also possible that Cat 8 may be adopted for other applications in the future.

### 13. Why should a customer consider buying a Cat 8 tester?

Customers looking to purchase a tester should seriously consider stepping up to the DSX-8000. Testers are a long term investment – thousands of DTX's that are more than a decade old are still in use today. Given such a long time horizon, it's difficult for a customer to predict whether or not they will encounter Cat 8 technology. The difference in cost between a DSX-8000 and a DSX-5000 is relatively small, while adding it afterwards is considerably more expensive, making the DSX-8000 the safer investment.

### 14. Will the DSX-8000 work with Versiv / LinkWare PC / LinkWare Live?

Yes, the DSX-8000 is fully compatible with all Versiv modules and works with LinkWare Live and LinkWare PC.





### 15. What is the trade-in program for DSX-5000 owners?

Customers who purchased the DSX-5000 (or any DSX kit) after December 1, 2016, can return their unit to their distributor by February 24, 2017 for a full refund and then purchase a DSX-8000. Customers who own a DSX-5000 purchased before that date can purchase a kit which will add Cat 8 capabilities to their tester.

Contact your local Fluke sales manager for details on these offers.

### 16. What is the trade in program for DTX owners?

There is no trade-in program for the DTX at this time.

### 17. What is happening with the DSX kits?

There are two things happening that are changing the DSX kit offerings. First, we will begin offering DSX-8000 kits in the same configurations as the existing DSX-5000 ones. Given that the price difference between a DSX-8000 kit and its DSX-5000 counterpart is relatively smaller, we expect the majority of kit purchases to migrate to the 8000. So the less popular DSX-5000 kits will be retired after March 31. Note that the discontinued kits account for only about 10% of the total DSX unit volume, and that customers can still buy these configurations by ordering the appropriate individual SKUs.

Kit	DSX-5000	DSX-8000
M	Retire	n/a
Mi	Retire	DSX-8000Mi
Qi	DSX-5000Qi	DSX-8000Qi
Oi	Retire	DSX-8000Oi
QOi	Retire	DSX-8000QOi
Pro	Retire	DSX-8000Pro

Second, all Versiv models will be available in a second version, which includes the Wi-Fi USB adapter. These models are indicated with a "-W" in their model numbers. We are keeping the existing "non W" models for those few customers who cannot accept models with Wi-Fi adapters (such as the US military), and for regions of the world where our Wi-Fi adapter is not approved.





### 18. What are the key marketing materials and activities?

Here are links to the key materials:

<u>Updated Versiv Brochure (available Feb 15)</u>

Order the Updated Versiv Brochure (available Feb 15)

<u>Updated Four-Page Product Flyer (available Feb 15)</u>

Order the Updated Four-Page Product Flyer (available Feb 15)

DSX CableAnalyzer Series Data Sheet

**Updated Versiv Configurator** 

<u>Updated "Five Reasons to Upgrade from DSX to Versiv"</u>

**Shield Integrity White Paper** 

Cat 8 Article

Cat 8 Landing Page

**Intertek Letter** 

Panduit Letter

**Profits in New Places**