**Fluke Networks**

**DSX-8000 - Cat 8 Learn About Page – News Media Edition**

1. **Where can I find supporting materials for this announcement?**

Photography – attached as a separate folder

[Intertek Verification of DSX-8000 2G Performance](http://www.flukenetworks.com/vftf/7001679) (English only)

[Panduit Endorsement Letter for DSX-8000](http://www.flukenetworks.com/vftf/7001678) (English only)

[DSX CableAnalyzer Series Data Sheet](http://www.flukenetworks.com/edocs/datasheet-dsx-5000-cableanalyzer) (Multiple Languages)

[White Paper: Cat 8 Standards and Tester Development](http://www.flukenetworks.com/Cat8_Article) (Multiple Languages Available 2/10)

[White Paper: Shield Integrity and Category 8](http://www.flukenetworks.com/Shield_Integrity) (Multiple Languages Available 2/10)

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

1. **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.

1. **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.

1. **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 to0 the shield fault, which greatly simplifies troubleshooting.

1. **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.

1. **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.

1. **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-5000** | **DSX-8000** |
| DSX-PLA804 | Cat 8 Permanent Link | No | Yes |
| DSX-CHA804 | Cat 8 Channel | No | Yes |
|  |  |  |  |
|  |  |  |  |
| **DSX-5000 Adapters** | | **Measurement Module Compatibility** | |
| **DSX-5000** | **DSX-8000** |
| DSX-PLA004 | Cat 6A / Class EA Permanent Link | Yes | Yes |
| DSX-CHA004 | Cat 6A / Class EA Channel | Yes | Yes |
| DSX-CHA021 | M12 4-Position | Yes | Yes |
| DSX-CHA003 | Coax Adapter | Yes | Yes |
| DSX-PC5e | Cat 5e Patch Cord | Yes | Yes |
| DSX-PC6 | Cat 6 Patch Cord | Yes | Yes |
| DSX-PC6A | Cat 6A Patch Cord | Yes | Yes |
| DSX-PLA001 | Universal Permanent Link | Yes | No |
| DSX-PLA012 | GG45 Class FA Permanent Link | Yes | No |
| DSX-CHA012 | GG45 Class FA Channel | Yes | No |
| DSX-PLA011 | TERA Class FA Permanent Link | Yes | No |
| DSX-CHA011 | TERA Class FA Channel | Yes | No |

1. **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.

1. **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.

1. **Why should I consider buying a Cat 8 tester?**

If you’re looking to purchase a tester, you 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 to predict whether or not you will encounter Cat 8 technology. The difference in cost between a DSX-8000 and a DSX-5000 is relatively small, while upgrading to Cat 8 afterwards is considerably more expensive, making the DSX-8000 the safer investment.

1. **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.