Wire**X**pert 4500

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APPROVED

25/40 G

CAT 8

Profile
CAT 6A

Test Settings
Limit: TIA - Cat 6A Chann·
Cable: Generic UTP
NVP: 68
Connector: Generic Unshielde

Project Settings
Site: Unspecified
Label Source: Simple Label

System Settings

AUTOTEST SETUP DATA TOOLS

LOCAL

REMOTE

The WireXpert is the first cable certifier with capability to certify the highest performance cabling systems in enterprise networks and data centers. Cable installers make significant gain in productivity with WireXpert's industry leading test speed and ease of use. With certification testing up to Class F_A and CAT 8 copper cabling, as well as MPO, SM, MM and MMEF fiber optic cabling, WireXpert is ready for 40 G and beyond. In fact, major cable vendors are using WireXpert in their labs for qualifying CAT 8 and Class (I & II) cabling systems under development.

CABLE CERTIFIER

IT Networks

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Wire**X**pert 4500

WireXpert 4500 sets new standards for user friendliness, with touch screen graphical interface at both Local and Remote units. The innovative design combines superior measurement accuracy with low cost of ownership and ease of use. WireXpert is geared up for certifying beyond the widest frequency range of 1-2,500 MHz.

Features

- First cable certification up to 2,500 MHz to support new TIA CAT 8 and draft ISO Class I and II standard

- Most advanced cable certification for all standards: Class D/E/E_A/F_A, Category 5e/6/6A, and the new CAT 8 as well as ISO draft standards Class I and Class II

- Accuracy independently verified by ETL

- Exceeds ISO Level VI (draft), V, IV, IIIe, and 2G and TIA Level IIIe accuracy requirements

- Endorsed by companies worldwide

- Many measuring modules available e.g. CAT 8, patchcord testing, Industrial Ethernet, Class F_A, RJ45, MMC PRO, RJ45

- Performs extended Fiber certification for 850/1,300 MM and 1,310/1,550 SM Fiber

- Advanced reporting and documentation

- The only certifier supporting all data center, premise cabling and industrial ethernet requirements

Easy to use and Ruggedized design

WireXpert comes with an intuitive touch sensitive user interface, featuring bright color LCD screens designed for industrial, heavy duty usage. The Dual Control System (DCS ™) – featuring identical devices for Local and Remote units – makes it really easy to operate the test cycles. Whether coordinated by two technicians or only one, walking time between outlets is minimized.

Fast and simple for highest productivity

WireXpert completes CAT 6A, Class F_A and CAT 8 certification test in a few seconds. It offers intuitive navigation through the screens on the device, and generates professional reports through its PC software eXport.

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CABLE CERTIFIER

Protects your Investment: Beyond 10 G

If you are testing 10 Gbit/s cabling, WireXpert is the clear choice. If you are thinking beyond 10 G, WireXpert is the only choice. Built on a future proof, scalable measurement engine, WireXpert protects your investment in test equipment as the data rates supported by the cabling systems increase. WireXpert employs a novel measurement architecture that achieves extremely wide bandwidth with superior measurement accuracy. Its unique RF measurement engine exceeds Level V requirements throughout the measurement frequency range.

Proven Accuracy

WireXpert has been independently verified by highly respected test laboratories such as ETL.

Vendor Approvals

Most leading cable manufacturers have extensively tested WireXpert and have approved the instrument for field certification and associated warranties of their structured cabling solutions. Laboratory testing and comparisons against vector analyzers have proven that WireXpert has excellent accuracy and measurements correlate with laboratory equipment. In fact, major cable vendors are using WireXpert in their labs for qualifying CAT 8, Class l & ll cabling systems under development.

CAT 6A (10 G) and beyond

WireXpert, with its industry leading measurement performance, provides adapters for testing cabling systems with higher performance than CAT 6A (500 MHz). For Class F_A cabling, testing is performed over full standards defined frequency range from 1 MHz through 1,000 MHz. Both TERA and GG45/ARJ45 interfaces are available through WireXpert test adapters. Both channel and permanent link testing are supported. Adapters are also available for testing CAT 7A patchcords. With measurement bandwidth exceeding 2,000 MHz, WireXpert is capable of testing well beyond CAT 8 cabling.

Wide and Comprehensive Expansion Kits

WireXpert provides numerous options for field and laboratory usage options including patchcord testing, Industrial Ethernet (RJ45 E2E links, M12 D and X-coded), VNA and Barewire. Tested and endorsed by various cable manufacturers for product development. Perform Alien Cross Talk testing efficiently with two sets of WireXpert without the use of special adapters, equipments or laptops. Test multiple parameters in a single execution.

Project Management Software

Manage test results and generate professional reports and warranty documents. Export results into graphical PDF reports in detail or summary, or CSV for data analyzing using the PC based software eXport.

Wire**X**pert
4500

WIREXPERT OPTICAL LOSS TEST KIT

WireXpert optical loss test kit supports all the latest standards from TIA 568 C.3 to ISO 14763-3 standard. By automatically calculating the loss budgets, WireXpert saves you trouble of having to perform cumbersome calculations and plugging in data for individual connectors and splices for different standards.

Features

- Perform Tier 1 Certification for ISO/IEC and TIA 568 C.3 Standards

- Measures and certifies length and loss for Singlemode at 1,310 nm and 1,550 nm and Multimode EF cabling at 850 nm and 1,300 nm

- Seamlessly integrates copper and fiber reports. Generate professional warranty and certification test reports

- Double your productivity with DCS ™ technology by using your remote unit as an independent optical certifier

Multimode and Singlemode Kits

WireXpert optical loss kits are available for both Multimode and Singlemode fiber networks. The modular solution allows testing both types of networks on the same WireXpert unit with interchangeable adapters. Each module lets you perform very accurate loss and length measurements at two wavelengths meeting all the various standard requirements. Both kits support certification of horizontal as well as back-bone cabling by supporting dual wavelength measurement on each adapter.

MPO Testing Kits

WireXpert's versatile MPO testing solution enables datacenter IT managers to get quick and accurate assessment of the quality of MPO links. Additionally, it helps in performing incoming inspection of MPO components like cassettes. The key feature of this solution is a 5-second Autotest that includes a detection of fiber connection map and measurement of loss on each channel.

EF Compliant Multimode Kits

Certification of Multimode fibers has often been a contentious issue due to the inherent uncertainties in the measurement process. ISO/IEC and TIA have recently adopted an Encircled Flux (EF) standard that standardizes the launch condition for the light sources used in Multimode test equipment. To comply to the new standards has launched the new EF compliant Multimode test adapters and kit.

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OPTIONAL TEST ADAPTERS

Copper Patch Cord testing with WireXpert

WireXpert offers an efficient way for quickly identifying and recording the performance of patch cord. With its fast and accurate dual-ended testing, WireXpert's patch cord test kits are suitable for both manufacturing testing, as well as for incoming inspection at end user premises. WireXpert patch cord test kits are available for testing CAT 5e, CAT 6, CAT 6A, CAT 7/7A, and CAT 8 patch cords.

Industrial Ethernet cabling test

WireXpert's industrial Ethernet cabling test solution comprise of M12 adapter kits. Both channel and permanent link configurations with M12 industrial Ethernet connector are supported. Industrial Ethernet kit with X-Coded M12 interface is also available, making it possible to effectively test 10 G ready industrial Ethernet cables.

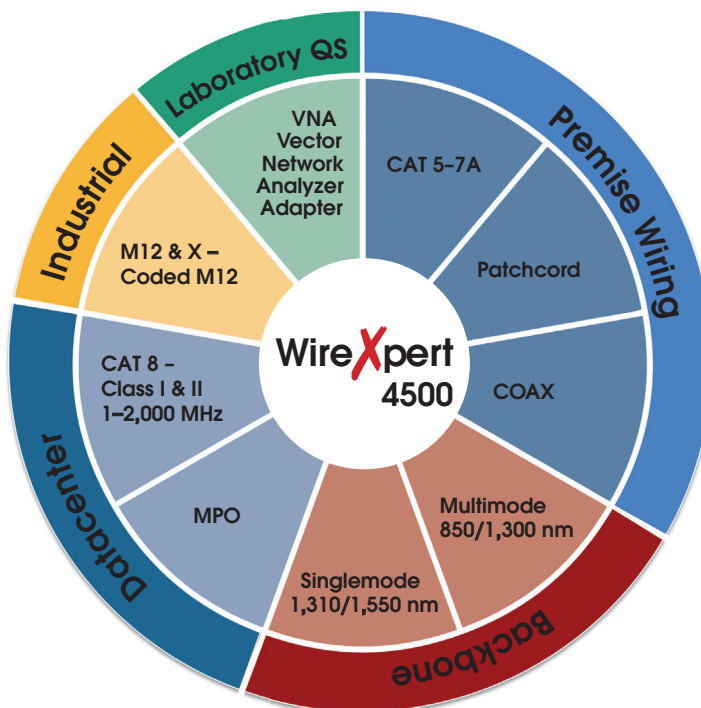*WireXpert 4500 Applications with optional test adapters*

Coaxial cable test

With coaxial test adapters, WireXpert supports testing of coaxial cables for attenuation and return loss over a wide frequency band.

Laboratory testing of cables and components

WireXpert features extremely versatile adapters that enable the lab technicians to replace expensive Vector Network Analyzer with WireXpert for performing differential S-parameter measurements over 1 MHz to 2,500 MHz. Contact us for more information on these adapters.
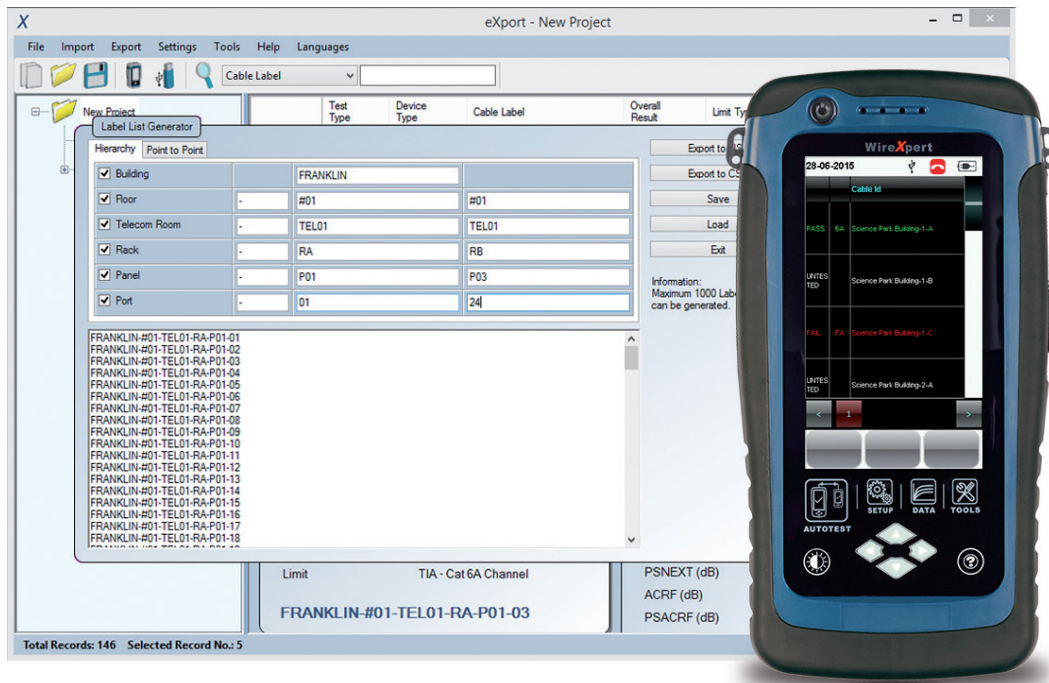
Alien Cross Talk

Alien Cross Talk testing with WireXpert is performed using two WireXpert sets. This means, there are no special adapters and no need for carrying a laptop to the field for data analysis.
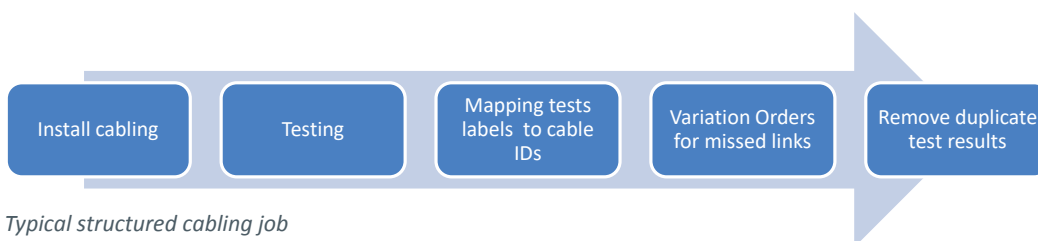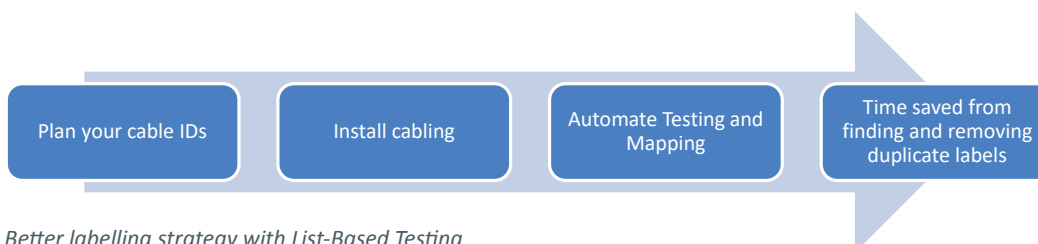
List-Based Testing

List-Based Testing (LBT) is the world first to adopt customized hierarchical cable labelling scheme. LBT changes how cable testing are conducted, from entering and saving a label after each test to simply choosing which label from the preloaded list to conduct the test.

| Install cabling | Testing | Mapping tests labels to cable IDs | Variation Orders for missed links | Remove duplicate test results |

Typical structured cabling job

The LBT is ideal for project managers who have preference on how cables should be labelled and create flexibility for onsite testers to conduct test in non-sequential order by choosing, skipping and returning to the untested points. When the site is completed, the project managers do minimal sorting and searching from their preferred list, saving time thus increasing productivity.

| Plan your cable IDs | Install cabling | Automate Testing and Mapping | Time saved from finding and removing duplicate labels |

Better labelling strategy with List-Based Testing

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CABLE CERTIFIER

New and Improved Report Generating Software - eXport

eXport is a project management software designed to work seamlessly with WireXpert, providing a complete platform from generating customized label to result analysis on your workstation.

Project Management and more

• List-Based Testing - generates customized cable labels efficiently by simply inputting building, floor, telecom room, racks and panel names or numbers

• Creates a project based environment to allow easy management of saved results such as searching, sorting (by test type, cable label, pass/fail, limit type, etc.), renaming and deleting

• Generates detailed or summarized field reports in PDF or CSV formats with your company's logo

• Provides detailed view of saved results with graphical interpretation in separate tabs

• Magnify plots for pin-point accuracy for analysis and studies

• Easy connection between device and workstation via USB cable or USB flash drive

• Remote control via USB cable connection for presentation or education purposes

• Supports importing of OTDR's *.SOR format and exporting to PDF format

• Available in 11 languages and expanding

• Available for download at itnetworks.softing.com

Kit Includes

WireXpert 4500 LAN Cable Certifier –
Class D, E, E$_A$, F, F$_A$, I, II, and CAT 5e, 6, 6A, 7, 7A & 8
Frequency Range up to 2,500 MHz
Ready for CAT 8 and draft Class I & II up to 2,000 MHz
Includes two measurement units:
Local and remote,
2 x CAT 6A channel adapters,
2 x CAT 6A link adapters,
2 x headsets,
Li-Ion batteries,
Power supplies,
USB drive,
Soft carry case,
Calibration certificate

WireXpert 4500

optimize!
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For more information please contact:

Parameter	Specification
COPPER TESTING	
Certification testing	TIA-568-C.2 CAT 3, 5e, 6, 6A, TIA-568-C.2-1 CAT 8 ISO/IEC 11801, EN 50173 Class D, E, E_A, F, F_A Draft Class I and Class II Permanent link and channel CAT 5e, 6, 6A, 7, 7A, 8 and patch cord
Max cable length for dual-ended Autotest	500 m
Insertion cycles	Channel: 10,000 typical Permanent link: 5,000 typical
TEST PARAMETERS	As specified in TIA 1152, IEC 61935-1
Wiremap	
Loop Resistance	0 to 40 Ω, ±0.1 Ω
Length	0 to 500 m, ±0.5 m (dual-ended testing)
Propagation Delay and Delay Skew	0 to 5000 ns, ±1 ns
Attenuation	0 to 70 dB, ±0.1dB
Pair-to-Pair and Power-Sum NEXT	0 to 85 dB, ±0.2 dB
Pair-to-Pair and Power-Sum ACRF	0 to 85 dB, ±0.2 dB
Return Loss	0 to 40 dB, ±0.2 dB
ACRN, PSACRN	0 to 85 dB, ±0.5 dB
Advanced diagnostics	Time-domain fault Locator for RL and NEXT
Measurement accuracy	ANSI/TIA-1152 Level 2G, IEC 61935-1 draft Level VI
Measurement frequency range	1-2,500 MHz
FIBER TESTING - SM	
Wavelengths	1310 nm, 1550 nm
Connector type	SC, LC (optional adapter needed)
Test standard	TIA 568 C.3, IEC 14763-3
TEST PARAMETERS	
Loss	0 to 31 dB, ±0.2 dB
Length	0 to 20,000 m, ±1.5 m
Output power	-5 dBm to -9 dBm
Receiver sensitivity	-40 dBm
FIBER TESTING - MM/MMEF	
Wavelengths	850 nm - 1,300 nm
Connector type	SC/FC-SC
Test standard	TIA 568 C.3, IEC 14763-3
TEST PARAMETERS	
Loss	0 to 24 dB, ±0.2 dB
Length	0 to 2,000 m, ±1.5 m
Dynamic range	24 dB/12 dB
Output power	-4 dBm to -10 dBm / -16 dBm to -20 dBm
Receiver sensitivity	-34 dBm / -40 dBm
Encircled-Flux (EF) compliance	IEC 61280-4-1 (MMEF), TIA-526-14C
VFL wavelength	650 μm (MMEF)
Power	0 dBm (MMEF)
GENERAL SPECIFICATIONS	
Interfaces	Probe Interface, RJ-45 Ethernet, USB host and device, talkset, power jack
Display	6" industrial LCD, touch sensitive area on both units
Enclosure	Ruggedized plastic with rubber over-mold, withstands 1.5 m drop test on hard surface
Remote unit abilities	View test results, save tests, start autotest
Power supply	AC 100-240 V to 12 V, 3A power adapter
Input over-voltage protection	Protected against Telco voltages
Battery	Removable and rechargeable Li-Ion
Battery capacity	>8 hours continuous operation
Internal storage capacity	>6,000 copper test results with full plot information for CAT 6A
External storage	USB Flash Drive
Dimensions	223 X 124 X 70 mm (inclusive of a 6ACH adaptor)
Weight	1 kg
Supported languages	TW, CS, EN, FI, FR, DE, IT, JA, KO, PL, PT, RU, ES, SV, TR
Calibration period	1 year
ENVIRONMENTAL	
Operating temperature	0 to 40 °C
Storage temperature	-20 to 60 °C
Relative humidity	10% to 80%
MINIMUM SYSTEM REQUIREMENTS FOR REPORTING SOFTWARE	
Microsoft Windows Vista/7/8/10, 32 or 64 bits	
Intel Core 2 Duo, 2GHz	
200 MB of free disk space	
1 GB RAM	
Microsoft.NET Framework 4.0	

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