

CATALOG PRODUCTS AND HIGHLIGHTS

Measurement Equipment
for LAN Network Infrastructures



Copper



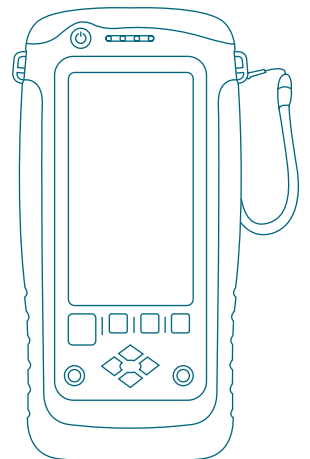
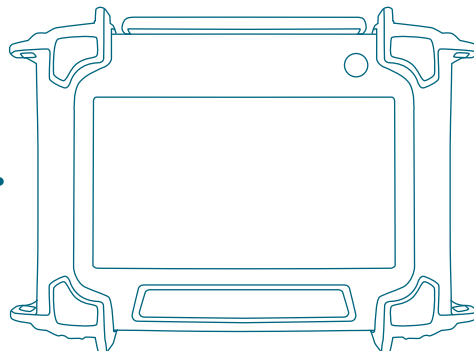
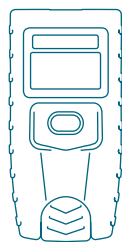
Fiber



Ethernet



Wi-Fi



FOREWORD

Softing IT Networks is a manufacturer of electronic measuring devices for verifying, qualifying, and certifying the cabling infrastructure of IT systems and is one of three business segments of Softing AG with headquarters in Haar, Germany. Our products are indispensable tools for installers and network operators worldwide to determine and document the quality and performance of cabling installations. They are also important tools for the operation of an IT system, as they allow fast and reliable troubleshooting of cabling systems, preventing dreaded network downtime and quickly resolving network outages if they occur.

Never before in the age of information technology has there been such a rapid proliferation in Ethernet cabling as in this decade, both in terms of data rates and number of new applications. While just a few years ago Cat 6A / Class E_A up to 500MHz was "state of the art" for 10 Gigabit Ethernet, today we speak of Cat 8 / Class I & II cabling up to 2000MHz - and this not exclusively for data centers. These new cabling types support 40Gb/s over a channel length of 30 meters, and are expected to transmit 25Gb/s over at least 50 meters in the future, significantly expanding the range of applications.

However, not only transmission speeds are growing dramatically but also the number of applications run over copper and fiber cabling. In addition to traditional route definitions from building cabling such as permanent link and channel link, new variants are emerging, such as end-to-end cabling for industrial connectivity and direct-attach or MPTL (Modular Plug Terminated Link) configurations to connect end devices directly to the trunk line. Areas of application for this are mainly the connection of surveillance cameras, Wi-Fi access points and the rapidly growing market for intelligent LED lighting.

Ethernet as a common communications protocol is now also becoming increasingly accepted outside the office and home cabling and is now widely used as the standard protocol in industrial and automotive environments as well. Relevant keywords here are IoT (Internet of Things) and IoE (Internet of Everything). Here requirements are not extremely high transmission speeds, but rather specific cabling configurations, connector types and ambient conditions. One emerging trend is "Single Pair Ethernet" systems, which will manage with only one twisted pair of wires.

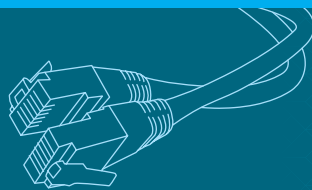
For you as an installer or user, this development comes with new challenges. You may have to cope, for example, with many more applications than ten years ago, and for this purpose you will need higher performing, more flexible measurement equipment that can be adapted to the new applications in the best possible way.

As a manufacturer of measurement equipment, we make sure to provide products that comply with the highest technological standards. In our latest catalog you will find exciting innovations around the latest developments on the market of measurement technology.

Your Softing IT Networks Team



COPPER CABLE



VERIFIERS

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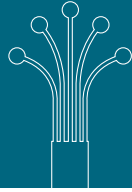
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FIBER OPTIC



QUALIFIERS

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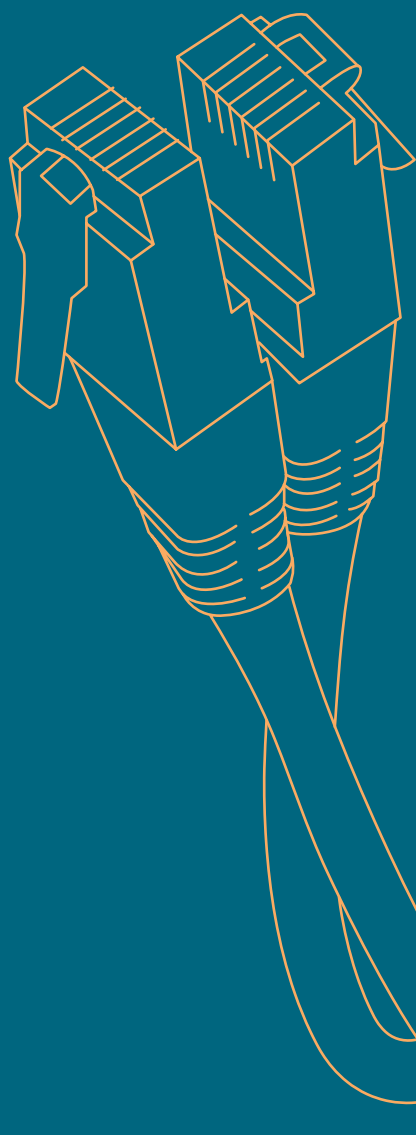
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COPPER CABLE VERIFIERS

VERIFIERS

Testers for network, telephone and TV (coax) cabling



| CableMaster | 200 | 500 | 550 | 600 | 650 | 800 | 850 |
|--|---------|--------|--------|--------|--------|--------|--------|
| Article number | 226504 | 226512 | 226580 | 226515 | 226516 | 226520 | 226521 |
| Application | | | | | | | |
| Cable Test | | | | | | | |
| Wiremap (i.e. shorts, opens, reversals, miswires, split pairs) | | | | | | | |
| Voltage warning | | | | | | | |
| Tone generator | | | | | | | |
| Remote ID (detection of identifiers) | | | | | | | |
| Length measurement capacitive/TDR | | / - | / - | - / | - / | - / | - / |
| PoE load test | | | | | | | |
| Saving results/PC reporting software | | | | | | | |
| Network Test | | | | | | | |
| Hub flash | | | | | | | |
| Ethernet and bandwidth detection | | | | | | | |
| Link/Ping test | | | | | | | |
| Discovery (LLDP, CDP, NDP) | | | | | | | |
| VLAN detection | | | | | | | |
| IPv6 support | | | | | | | |
| Connectors | | | | | | | |
| RJ45/RJ11-12/coax (type F) | / - / - | / / | / / | / - / | / - / | / - / | / - / |
| USB port | | | | | | | |
| Accessories | | | | | | | |
| Cable detection and port mapping (CP15) | | | | | | | |
| Remote ID Set RJ45 | 1-5 | | 1-5 | | | | |
| Remote ID Set coax | | | 1-5 | | 1-20 | | 1-20 |
| Alligator clip | | | | | | | |
| Wiremap remote unit (RJ45 and RJ11-12) | | | | 1 | 8 | 1 | 8 |
| RJ45 patch cord | | | 2 | 2 | 9 | 2 | 9 |
| Micro USB cable | | | | | | | |
| Carrying bag | | | | | | | |

Included Optional Copper Cable Ethernet network

CableMaster 200

CU




The entry-level model

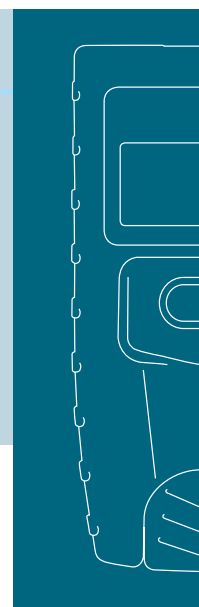
CableMaster 200 is a low-cost and compact wiremap tester for Ethernet cables. The device checks twisted pair cables for wiring errors such as breaks, short circuits, crossed cores and split pairs.

With integrated remote unit and built-in tone generator. Unlabeled ports can be traced with the tone tracer probe or remote units.

FEATURES

Application: 

- › Display of cabling and cable faults according to standards
- › Test of cables with a length of up to 300m
- › Built-in tone generator can be used for cable detection with a tone tracer (optional accessory)
- › Removable remote unit allows testing of long cable runs
- › Support of 5 remote identifiers
- › Clear LCD display with all test information, including Pass/Fail display
- › Very simple operation
- › Compact size



Article number

226504

CableMaster 200

Scope of delivery: 1 CableMaster 200, 1 Mapper-ID remote set (5 RJ45 remotes)

Optional accessories: tone probe, e.g. CableProbe CP15 (Article no. 226007) tone probe

CableMaster 500/550




The all-rounder

CableMaster 500 combines wiring test, continuity test, tone generation and length measurement in a handy, easy-to-use device that is suitable for installation, troubleshooting and maintenance on telephone, network and coaxial cables. A backlit LCD display, a keypad that glows in the dark and an integrated LED flashlight facilitates work in low light conditions.

With its versatility and enhanced functionality, the CableMaster 500 is an indispensable and valuable tool for professional installers.

CableMaster 550 consists of the CableMaster 500 including extensive accessories.

FEATURES

Application: 

- › Tests according to standard: miswires, shorts, opens, reversals and split-pairs
- › Measures cable length and distance to fault
- › Test for short circuits and split-pairs without remote
- › Checks the different types of cables (network, telephone and coaxial cables) for continuity
- › Measures switchable length in feet/meters
- › Continuous test mode for troubleshooting
- › Locates up to 20 network or coaxial cables
- › Locates the connection on active ports by flashing the port LED
- › Acoustic signal gives additional feedback
- › Warning symbol on detection of applied voltage
- › Easy-to-read LCD display with backlighting and large icons, keypad that glows in the dark and integrated LED flashlight for easy working in dark environments
- › Master remote unit is located in the module slot of the main unit

| | |
|----------------|---|
| Article number | CableMaster 500 |
| 226512 | Scope of delivery: 1 CableMaster 500 Optional accessories: tone probe e.g. CableProbe CP15 (Article no. 226007) |
| Article number | CableMaster 550 |
| 226580 | Scope of delivery: 1 CableMaster 500, 1 tone probe CableProbe CP15 (Article no. 226007), 1 RJ45 cable/alligator clip, 1 RK305 (RJ45 and coax remote detectors (1-5)), 2 RJ45 cables, 1 9V battery, 1 carrying bag |

CableMaster 600/650

CU





The comfort model

CableMaster 600 is a cable tester for network, telephone, and coax cabling, equipped with an RJ45 jack for network cables and connector for coax cables. The CableMaster 600 verifies the wire map, determines the cable length and distance to fault. The results can be saved and further processed using the PC reporting software. Adding to this, the CableMaster 600 offers extensive troubleshooting features such as cable tracing, link detection up to 1Gb/s, PoE testing and socket allocation by remote units.

CableMaster 600 is the ideal test device for professional installers and network operators who need to test RJ45 and coaxial cabling and document the correct wiring and cable lengths in test protocols.

CableMaster 650 consists of the CableMaster 600 including extensive accessories.

FEATURES

Application:  

- › Tests network and coaxial cabling (RJ45 and F coaxial connector)
- › Graphic display of the wire map for quick troubleshooting
- › Determines cable length and distance to fault by means of full TDR measurement
- › Cable tracing and end device detection with cable/port ID remote units
- › PoE detection and load test
- › Link test up to 1Gb/s to determine link status and speed
- › High-contrast color display guarantees good readability in any environment
- › Test report and documentation with PC reporting software

CableMaster 600 cabling and network tester is a versatile tool for testing the cabling and allocating outlets to the patch panel during installation, or for troubleshooting during network operation. The test results are displayed on the full-color graphic screen in a clear and easy to understand way.

CableMaster 600 enables quick identification of network ports, while identifying possible link capability and link status. In addition, the PoE availability (Power over Ethernet) is displayed and can be checked with a load test compliant with IEEE 802.3 af/at.

CableMaster 600/650

| | |
|-----------------------|---|
| Article number | CableMaster 600 |
| 226515 | Scope of delivery: 1 CableMaster 600, 1 remote unit, 2 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carry case Optional accessories: tone probe e.g. CableProbe CP15 (<i>Article no. 226007</i>) |
| Article number | CableMaster 650 |
| 226516 | Scope of delivery: 1 CableMaster 600, 1 tone probe CableProbe CP15, 8 remote units, 1 RJ45 cable/alligator clip, 20 coax identifier remotes (1-20), 9 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carrying bag |

CableMaster 800/850

CU



Professional cable and network tester with extended test functionality for network, telephone and coaxial cables

CableMaster 800 is a professional cabling tester equipped with an RJ45 jack for network cables and an F-type connector for coaxial cables. It verifies the wire map and cable lengths as well as distance to the fault. The results can be saved and further processed using the PC reporting software. The CableMaster 800 also offers extensive network diagnostic features for troubleshooting, such as link detection up to 1Gb/s, ping, network discovery, PoE tests and much more.

CableMaster 850 consists of the CableMaster 800 including accessories.



FEATURES

Application:  

- › Tests network and coaxial cabling (RJ45 and F coaxial connection)
- › Graphic display of the wire map for quick troubleshooting
- › Measures cable length and distance to fault using full TDR measurement
- › Cable tracing and end device detection with cable/port ID remote units
- › PoE detection and load test
- › Link test up to 1Gb/s to determine link status and speed
- › Pings single or lists of IPv4 and IPv6 addresses and any URL on the Internet
- › Network Discovery creates lists of broadcasted devices
- › CDP/LLDP/NDP and VLAN detection
- › High-contrast color display guarantees good readability in any environment
- › Test report and documentation with PC reporting software

CableMaster 800 features extensive test capabilities for RJ45 network, telephone and coaxial cabling. Consisting of a handheld and a test/ID remote unit, the CableMaster 800 is the perfect tool to test RJ45 cabling, displaying the results in a wire map format on a full-color graphical display. It verifies continuity, tests for shorts, opens, reversals, miswires, and split pairs. Cable length and distance to fault can be measured with the built-in full TDR (Time Domain Reflectometer)

CableMaster 800 can feed a modulated audio signal into the cabling, which can be used with an optional tone probe for cable detection or allocation. Numbered cable ID remotes allow the user to easily identify which outlet is connected to the appropriate patch panel port.

CableMaster 800/850

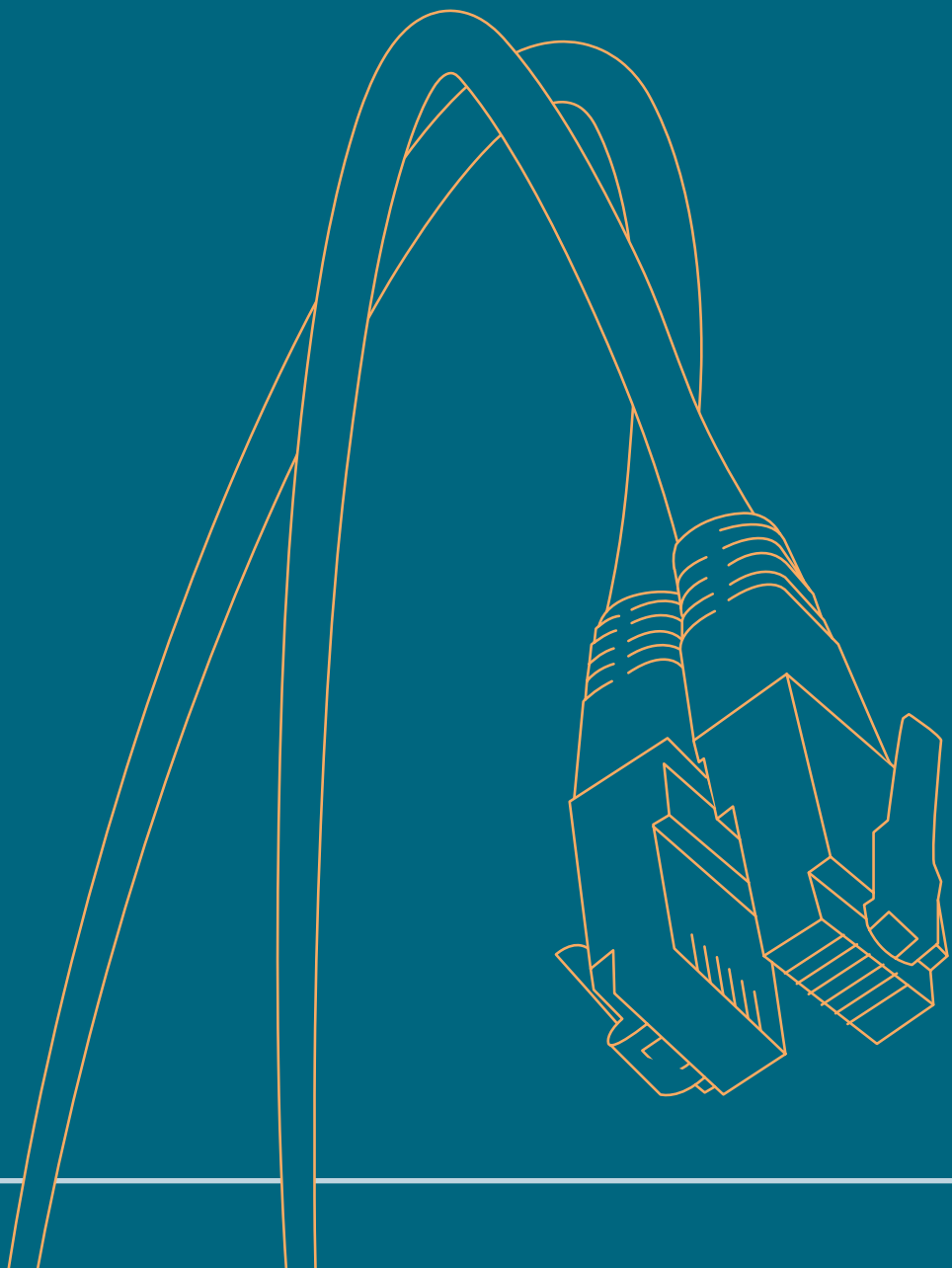
The CableMaster 800 enables rapid identification of network ports while displaying link capability and current link status. With added network discovery features, any broadcasted devices in the network can be discovered and displayed and saved as a list. Pinging of individual or lists of IPv4 and IPv6 addresses as well as any URL shows their accessibility.

Identifies CDP/LLDP/NDP and VLAN to quickly give the user information about the network configuration. In addition, PoE (Power over Ethernet) availability is displayed and can be checked with a load test compliant with IEEE 802.3 af/at.

| | |
|-----------------------|---|
| Article number | CableMaster 800 |
| 226520 | Scope of delivery: 1 CableMaster 800, 1 remote unit, 2 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carrying bag Optional accessories: tone probe e.g. CableProbe CP15 (<i>Article no. 226007</i>) |
| Article number | CableMaster 850 |
| 226521 | Scope of delivery: 1 CableMaster 800, 1 tone probe CableProbe CP15 (<i>Article no. 226007</i>), 8 remote units, 1 cable RJ45/alligator clip, 20 coax identifier remotes (1-20), 9 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carrying bag |



COPPER CABLE QUALIFIER



NETXPERT XG2

NETXPERT XG2plus

The new generation of Ethernet Speed Certification

New standards defining data rates up to 10Gb/s are a big challenge for latest generation qualifiers. Particularly cabling for wireless access points has to support ever increasing data rates. In order to verify if the cabling installed is able to support the increased data rates, operators need to perform adequate testing before commissioning the network, to avoid any unpleasant surprises.

NetXpert XG2 enables you to meet these new challenges now!



FEATURES

Application:

PASSIVE TESTS

- › Test of IEEE 802.3 compliance for data cabling with link speeds of 10Gb/s
- › **Copper cabling:**
 - Measures the signal-to-noise ratio (SNR)
 - Carries out a Bit Error Rate Test (BERT)
 - Measures delay skew
 - Combined length measurement performing TDR and capacitance measurements for highly accurate test results and easier troubleshooting even of shorts
 - Full-color wire map shows faults, miswires, reversals, shorts and split pairs in a clear and easy to understand way
- › **Fiber optic cabling:**
 - Carries out a Bit Error Rate Test (BERT)
 - Evaluates connector endfaces using a fiber microscope
 - Measures the insertion loss
 - LiveLight: real-time optical loss monitoring

ACTIVE ETHERNET TESTS

- › Support of IPv4 and IPv6
- › Detection and integration of VLANs
- › Finds the network participants (Network Discovery)
- › Identifies defective PoE switches by PoE load test up to 90W (Class 8)
- › DHCP test
- › Definition and storage of ping lists
- › LLDP/CDP detection and analysis
- › Trace Route
- › Wi-Fi scan of available access points (2.4GHz, plus 5GHz band with external Wi-Fi dongle)

REPORTING

- › Saves test results and generates test reports
- › Easy data transfer from the device to the PC (via USB)

TEST FOR HIGHEST NETWORK SPEEDS WITH YOUR QUALIFIER

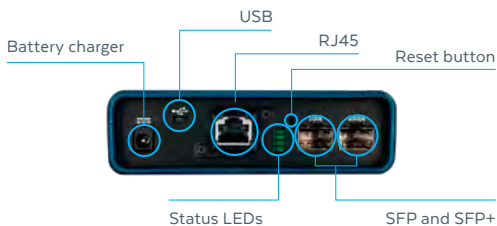
The new NetXpert XG2 verifies if cabling channels support maximum transmission rates of up to 10Gb/s, irrespective of cable categories, patch panels, or outlets installed. NetXpert XG2 provides a precise statement by automatically performing three individual tests and which are combined into an overall test result. By performing a sequence of various tests, the NetXpert XG2 verifies error-free data transmission up to 10Gb/s. The Signal-to-noise ratio (SNR) is measured, followed by a Bit Error Rate Test (BERT) and delay skew test to qualify Gigabit transmission. Delay skew indicates the signal time delay between the wire pairs used. Excessive delay can result in a serious degradation of transmission performance, making it impossible for the receiver to interpret the data stream correctly. Delay skew, just as the signal-to-noise ratio, are considered to be crucial parameters for a reliable data transmission. For fiber optic links, performance is measured by a Bit Error Rate Test (BERT) and the insertion losses of the link.

TROUBLESHOOTING ACTIVE NETWORKS

NetXpert XG2 offers a comprehensive tool set for active network troubleshooting. This includes load tests for voltage drop to verify stability of PoE supplies, identification of the devices connected to the network (Network Discovery), and detection of availability of priority devices (Ping and Traceroute).



MAIN UNIT PORTS



ACTIVE REMOTE PORTS



INCLUDING PORTS FOR FIBER OPTIC TESTS

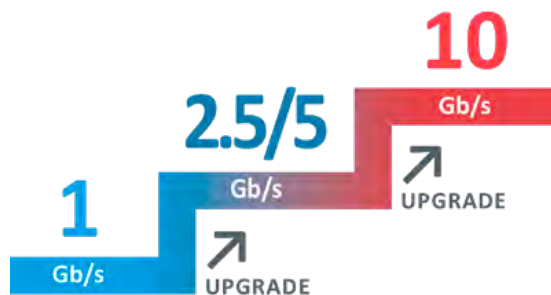
The NetXpert offers full flexibility regardless of whether you are measuring fiber or copper cabling. In the area of passive tests, a throughput test and fiber optic insertion loss test (with NetXpert XG2-PLUS or upgrade with extension set) is also possible.

REPORTING

The NetXpert XG2 offers enough internal memory even for large projects and, if required, generates complete standards-based test reports containing all the necessary information. PDF reports are generated internally, which can be passed on via USB stick.

WELL-EQUIPPED FOR THE CHALLENGES OF THE FUTURE

NetXpert XG2 ensures a future-proof start into the new era of high-speed qualification. The NetXpert series offers simple upgrades to your firmware, and a license system allows for later upgrades to add new features. There are currently three options (1, 2.5/5 and 10Gb/s Ethernet). The purchase of a Step-Up license extends the functionality of the device by one step.



NETXPERTXG2

ACCESSORIES

Extensive accessories make the NetXpert XG2 the ultimate all-purpose tool.

- Individual cables can be connected by combining an integrated tone generator and an external tone probe (e.g. *CableProbe CP15*, Article no. 226007).
- Port Identifiers (Article no. 226581) facilitate the assignment of the connection ports in case of missing or incorrect labeling. Wiremap Identifiers (Article no. 226528) additionally allow an assessment of the wiring.
- SFP modules are available for carrying out fiber optic tests: multimode 1G (Article no. 400984), singlemode 1G (Article no. 400982), multimode 10G (Article no. 400985) and singlemode 10G (Article no. 400986). A fiber microscope enables inspection of the quality of connector end faces (Article no. 226539)

All wear parts (e.g. RJ45 jack) can be replaced easily and conveniently.

VERSIONS

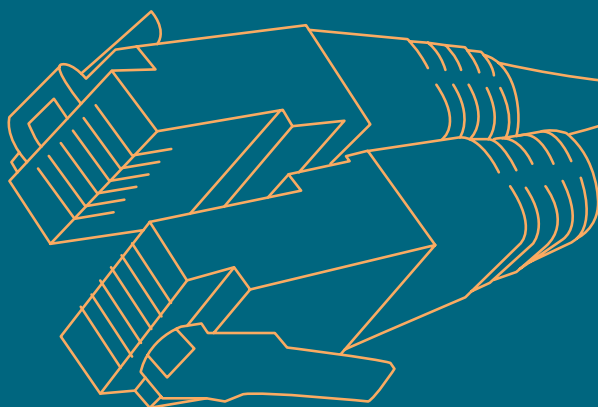
| Performance levels | 1G | | | | 2.5/5G | | | | 10G | | | | XG2-PLUS | | | |
|--------------------|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|
| | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | |
| Max. Speed | | | | | | | | | | | | | | | | |
| 10Gb/s | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| 2.5/5Gb/s | - | - | - | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - |
| 1Gb/s | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| Wi-Fi | ✓ | | - | | ✓ | | - | | ✓ | | - | | ✓ | | - | |

✓ Copper
 ✓ Fiber Optic
 ✓ Wi-Fi

| | |
|-----------------------------|---|
| Article number | <p>NetXpert XG2</p> <p>Scope of delivery: 1 NetXpert XG2 main unit, 1 Active Remote unit, 2 power supplies, 2 RJ45 Cat 6_A test cables, shielded, 1 hard case, 1 quick start guide</p> <p>226737 NetXpert XG2 - 1G</p> <p>226739 NetXpert XG2 - 2.5/5G (includes 1 additional upgrade license)</p> <p>226736 NetXpert XG2 - 10G (includes 2 additional upgrade licenses)</p> <p>226555 License for one upgrade level</p> |
| Article number | <p>NetXpert XG2-PLUS</p> <p>226735 Scope of delivery: 2 NetXpert XG2 main units, 1 Active Remote unit, 2 RJ45 Cat 6A patch cords, 2 OM4 LC duplex multimode patch cords, 2 OS2 LC duplex singlemode patch cords, 3 power supplies, copper and fiber couplers, 1 hard case, 4 upgrade licenses, 1 quick start guide</p> |
| Article number | <p>NetXpert XG2 Fiber Extension Kit</p> <p>226738 Scope of delivery: 1 NetXpert XG2 main unit, 1 power supply, 2 OM4 LC duplex multimode patch cords, 2 OS2 LC duplex singlemode patch cords, 2 LC couplers, 1 hard case, 1 quick start guide, 2 upgrade licenses (Please order SFP modules separately)</p> |
| Optional Accessories | <p>Wiremap remotes, RJ45 remote identifier set, tone probe CP15, fiber microscope (see page 53), Active Remote unit, suitable SFP modules (for part numbers see above under Accessories)</p> |



COPPER CABLE CERTIFIERS



WireXpert Series

The choice is yours. Find the version that fits best to your field of work from three WireXpert 500 variants: Softing IT Networks offers a Cat 6A/Class E_A copper certification tester (WireXpert 500), a fiber-only certification tester (WireXpert 500 Fiber-only), or a combined Cat 6A/Class E_A copper and fiber certification tester (WireXpert 500-PLUS).

And if the requirements change? No worries! a new certification tester when your requirements change. An upgrade to 2500MHz is also possible. Or you can start directly with our premium model: The WireXpert 4500 enables copper and fiber optic certifications up to 2500MHz based on the latest Cat 8, Class I & II standards.

WireXpert 500

certifies copper cabling up to 500MHz compliant with the relevant Class D/E/E_A and Cat 5e/6/6A. In addition to twisted pair cabling, industrial Ethernet RJ45, M12-D and X-coded systems, coax cabling and patch cords can also be measured. The certifier exceeds the accuracy requirements of ISO and TIA Level IIIe and displays the test results within seconds due to extremely short measuring times with the integrated autotest feature. Also available as fiber-only version.

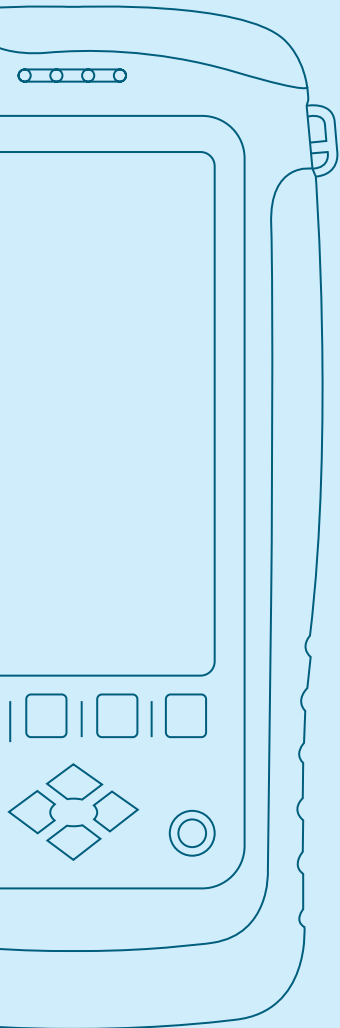
WireXpert 500plus

is the technologically advanced combination model for copper testing up to 500MHz according to Class D/E/E_A, Cat 5e/6/6A standards and for fiber-optic multimode and singlemode testing (850/1300nm and 1310/1550nm). The WireXpert 500-PLUS is compatible with all adapters and can be upgraded to 2500MHz for Cat 8/Class I & II or ISO/IEC Class I & II measurements.

WireXpert 4500

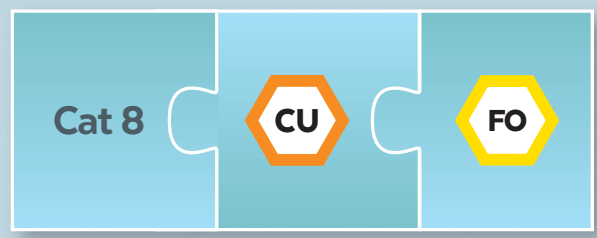
WireXpert 4500pro

enables certification of highest performance cabling systems in enterprise networks and data centers. An extremely fast measurement technology and intuitive device operation enable highly accurate and rapid certification measurements.



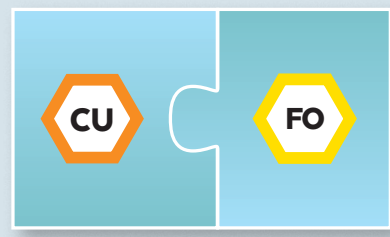
Safe into the future with flexible upgrades

WireXpert
4500
WireXpert
4500pro



UPGRADE

WireXpert
500plus



UPGRADE

WireXpert
500





WireXpert 500



User-friendly certifier for copper cabling

The WireXpert 500 has a high-contrast touch-sensitive LCD color screen with intuitive user guidance and is designed for heavy-duty use in the industry. The Dual Control System (DCS™) simplifies and accelerates measurement procedures, as it comprises two identical handheld devices, local and remote.

FEATURES

Scope of application:   (by upgrade)

- › Cost-effective cabling certifier for structured building cabling and Industrial Ethernet up to 500MHz
- › Certification tests according to cabling standards – Class D/E/E_A & Cat 5e/6/6A
- › Meets TIA and ISO Level III accuracy requirements
- › Certification measurements of patch cords
- › Comprehensive reporting and documentation with the eXport software
- › **Industrial Ethernet cabling measurement**
The WireXpert 500 measurement solution for Industrial Ethernet cabling comprises various test cord kits and is suitable for measurements in channel and permanent link configuration as well as for E2E links (please order E2E adapters separately) with Industrial Ethernet connection. Test cord kits are available, e.g. interfaces for M12 D-coded, M12 X-coded and for RJ45, which also allow efficient measurement of 10 Gigabit-capable Industrial Ethernet cabling
- › **Coaxial cable measurement**
With the optional coaxial measurement adapters the WireXpert 500 is also able to measure length, resistance, delay slew and return loss of coaxial cables

Article number

WireXpert 500

228071

Scope of delivery: 2 identical handheld devices (LOCAL and REMOTE) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 Class E_A channel adapters, 2 Class E_A permanent link adapters with test cord, 2 intercom sets, 1 USB stick, 1 quick start guide, 1 soft carrying case

WireXpert 500 plus



CU



WireXpert 500-PLUS: Copper and fiber optic certifier

WireXpert 500-PLUS sets new standards in ease of use for the certification of copper and fiber optic cabling. Local and remote units are equipped with a touch-sensitive color screen. The innovative concept combines measuring accuracy and ease of use with low operating costs. The devices of the WireXpert 500 series are designed for certification up to 500MHz and can be upgraded for the largest possible frequency range of 2500MHz.

FEATURES

Application:  

- › Combined 500MHz copper and fiber certifier for MM at 850 and 1300nm and for SM at 1310 and 1550nm
- › Reliable certification tests for all standards: Cat 5e/6/6A, Class D/E/E_A
- › Measurement accuracy independently tested by ETL
- › Exceeds ISO and TIA Level IIIe accuracy requirements
- › Can be upgraded directly in the field for many options
 - Adapter for tests on patch cords and cabling such as Industrial Ethernet, Class I and II, coax or fiber
 - Video microscopy
 - Cloud connectivity
 - Comprehensive reporting and documentation with the eXport software
- › The devices of the WireXpert series are versatile and suitable for use in office environments, industrial environments, laboratories and data centers
- › **User-friendly, very robust design**
The WireXpert 500-PLUS has a high-contrast, touch-sensitive LCD color screen with intuitive user guidance and is designed for continuous use in industry. The Dual Control System (DCS™) simplifies and accelerates the measurement process by providing two identical handheld devices, local and remote
- › **Fast and easy for highest productivity**
The WireXpert performs a Cat 6A/Class E_A and fiber certification test in seconds. It offers intuitive navigation via on-screen menus and generates professional reports using the supplied PC software eXport

Article number

228144

WireXpert 500-PLUS

Scope of delivery: 2 identical handheld devices (LOCAL and REMOTE) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 Class E_A channel adapters, 2 Class E_A permanent link adapters with test cord, 2 intercom sets, 1 USB stick, 1 quick start guide, 1 soft carrying case

Optional accessories: Fiber optic microscope (see page 53, Article no. 226539)

WireXpert 4500

WireXpert 4500 *pro*



WireXpert 4500 – the flexible premium model

Modern cable certification for all standards: Class D/E/E_A/F/F_A, Cat 5e/6/6A and the new standards Cat 8, Class I & II.

WireXpert 4500 enables certification of highest performance cabling systems in enterprise networks and data centers with maximum flexibility.

Reliable measurement equipment and the intuitive operation of the WireXpert enable fast and accurate certification tests and improve project productivity.

FEATURES

Application:  

- › Measuring device for certifications up to 2500MHz
- › Modern cabling certification for all standards: Class D/E/E_A/F/F_A, Cat 5e/6/6A/7/7A and the new standard Cat 8 and Class I & II from ISO/IEC
- › Fast autotest in less than 9 seconds
- › Independent verification of measurement accuracy by ETL
- › Meets and exceeds the requirements of ISO Level VI, V, IV, IIIe and TIA Level 2G, IIIe
- › Direct Current Resistance Unbalance (DCRU) measurements for high power PoE (adapters already included with WireXpert 4500-PRO)
- › Supports the extended certification for optical fibers at 850/1300nm (multimode) and 1310/1550nm (singlemode)
- › Can be upgraded directly in the field for many options
 - Adapter for tests on patch cords and cabling such as Industrial Ethernet, Class I and II, coax or fiber
 - Video microscopy
 - Cloud connectivity
 - Comprehensive report and documentation with eXport software

EASY TO USE AND RUGGEDIZED DESIGN

WireXpert comes with high resolution color LCD touch screens and an intuitive touch sensitive user interface, 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 test cycles.

FAST AND EASY FOR MAXIMUM EFFICIENCY

High productivity through fast autotests and short post-processing times. Among the advantages of the WireXpert are the intuitive screen navigation through the individual menus and the eXport reporting software for professional reporting on the PC.



PROTECTS YOUR INVESTMENT BEYOND 10GBS

If you are testing 10Gb/s cabling, WireXpert is the clear choice. If you are thinking beyond 10G, WireXpert is the only choice. Built on a future proof, scalable measurement engine, WireXpert 4500 protects your investment in test equipment as data rates supported by the cabling systems increase.

WireXpert 4500 provides various adapters for the certification of cabling systems beyond Cat 6A/Class E_A. The device covers cabling systems of Class F_A up to Cat 8 and Class I and II with the required accuracy. Adapters such as TERA, GG45/ARJ45 and MMCPPro are also available.

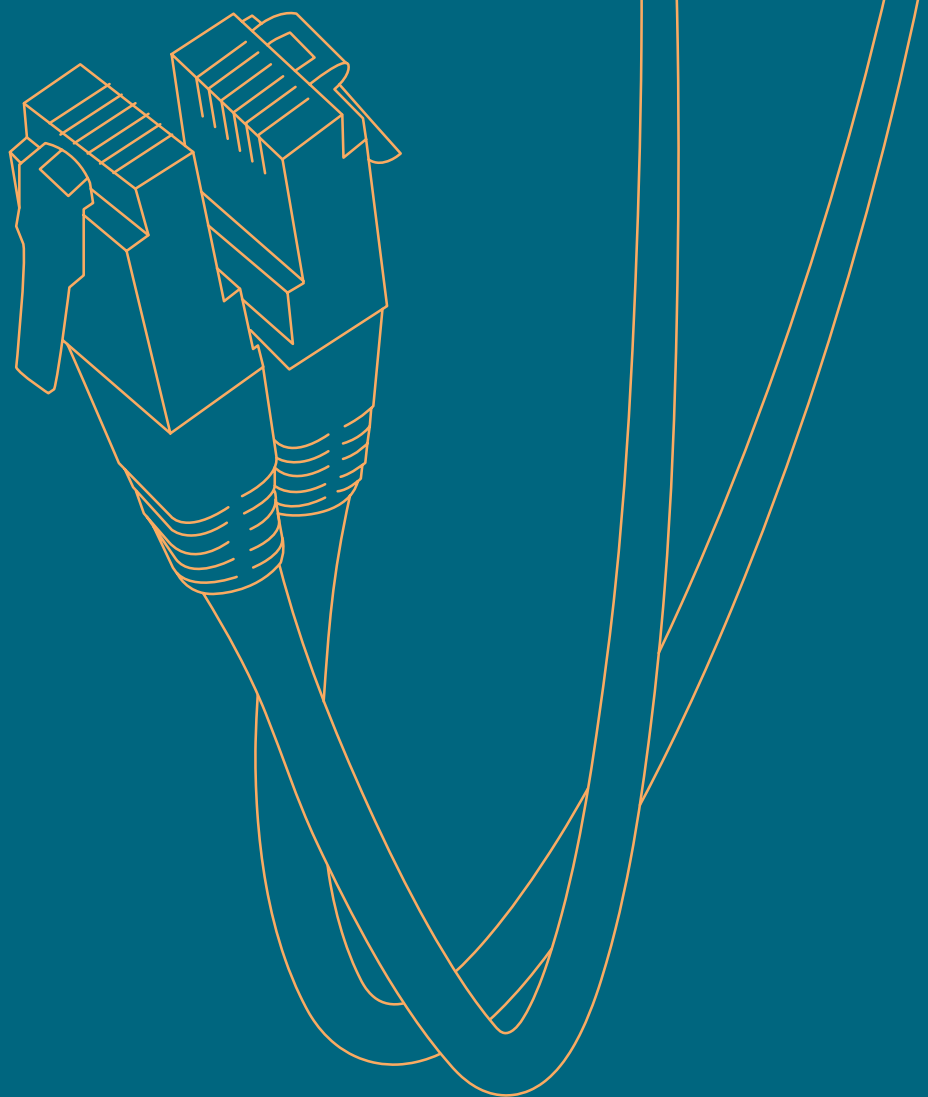
PROVEN ACCURACY AND VENDOR APPROVALS



WireXpert has been independently verified by highly respected test laboratories such as ETL. Leading cable and component manufacturers have tested the WireXpert extensively and approved the device for field certifications and associated warranties of their structured cabling solutions.

In fact, major cable vendors are using WireXpert in their labs for qualifying Cat 8 cabling systems under development.

| | |
|-------------------------------------|--|
| <p>Article number</p> <p>228070</p> | <p>WireXpert 4500</p> <p>Scope of delivery: 2 identical handheld devices (LOCAL and REMOTE) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 Class E_A channel adapters, 2 Class E_A permanent link adapters with test cord, 2 headsets, 1 USB stick, 1 quick start guide, 1 soft carrying case</p> |
| <p>Article number</p> <p>228280</p> | <p>WireXpert 4500-PRO</p> <p>Scope of delivery: 2 identical handheld devices (LOCAL and REMOTE) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 Cat 6A+ channel adapters (DCRU), 2 Cat 6A+ permanent link adapters (DCRU) with test cord, 1 referencing cord, 2 headsets, 1 USB stick, 1 quick start guide, 1 soft carrying case</p> |



ADAPTERS ACCESSORIES

Cat 6_A+ Adapters



Measuring adapter for 4PPoE

CAT6_A+ adapters for the WireXpert Series enable all WireXpert 500, 500-PLUS and 4500 devices to test Direct Current Resistance Unbalance (DCRU) on twisted pair shielded and unshielded LAN cabling additionally to the regular Autotest parameters. CAT6_A+ adapters also help to identify on shielded cables whether the cable shield is connected to the correct socket.

FEATURES

- › Measures the direct current (DC) resistance unbalance between and in pairs of twisted pair LAN cabling according to TIA and IEC specifications
- › Allows the testing of all common autotest parameters such as insertion loss, NEXT, return loss, ACR-N and ACR-F as well as the related power-sum values
- › Shield Integrity Test to determine correct connection of the shield to the cabling connections
- › Supports testing of crossover cables

With the roll-out of high power 4PPoE (4 Pair Power over Ethernet) applications up to 60 or 90W, the Direct Current (DC) resistance of twisted pair cabling becomes an important parameter.

If the DC resistance of a cable pair is too high and/or the DC resistance between pairs or even within wires of a pair differs too much, the temperature of that pair or wire can increase above the allowed cable or connector specification. As a result, that cabling will suffer accelerated aging or even damaging. Furthermore, there is also a significant risk to lose data due to signal distortion. Therefore, ISO/IEC, TIA and Cenelec have defined testing of DCRU as an optional parameter that can be added to regular cable certification, in case the use of high power PoE is planned for a specific cabling installation.

| | |
|----------------|--|
| Article number | Cat 6_A+ DCRU channel adapters (1 pair) |
| 228271 | Scope of delivery: 2 test adapters for DC resistance unbalance with RJ45 jacks, 1 soft case, 1 quick start guide |
| Article number | Cat 6_A+ DCRU permanent link adapters (1 pair) |
| 228273 | Scope of delivery: 2 permanent link test cords, 1 referencing cord, 1 calibration artifact |

Patch Cord Test Adapters

Fast and reliable verification of patch cords

Insufficient quality of patch cords often adversely influences the performance of an otherwise good cabling structure. With its fast and precise dual-ended test, the WireXpert patch cord test kit can be used as well for the inspection before use of the patch cords by the user as well as for testing cables by manufacturers during production. WireXpert patch cord test kits are available for testing Cat 5e, Cat 6, Cat 6_A, Cat 7 and Cat 7_A patch cords.



FEATURES

- › WireXpert performs patch cord tests compliant with all common standards. Patch cords of the categories 5e, 6, 6_A, 7 and 7_A can be tested with the WireXpert patch cord test adapters in the required performance class
- › The WireXpert graphical menu makes it easy to select TIA or ISO limits for patch cords of a given length. The WireXpert tests all parameters of a patch cord at both ends in a single autotest
- › Extremely fast autotest with “dual-end” patch cord certification
- › Intuitive selection of test configuration and thresholds
- › Test kits suitable for all ISO and TIA patch cord standards
- › Enables input of user-defined test values
- › Transfer of the test results into the eXport software
- › Easy replacement of worn measuring sockets

Article number

CU patch cord test adapter for WireXpert

| | |
|--------|--|
| 228098 | Cat 7_A patch cord adapter (1 pair) with GG45 interface for testing shielded Cat 7 _A patch cords |
| 228027 | Cat 6_A patch cord adapter (1 pair) with Cat 6 _A interface for testing shielded and unshielded Cat 6 _A patch cords |
| 228028 | Cat 6 patch cord adapter (1 pair) with Cat 6 interface for testing shielded and unshielded Cat 6 patch cords |
| 228029 | Cat 5e patch cord adapter (1 pair) with Cat 5e interfaces for testing shielded and unshielded Cat 5e patch cords |
| 228037 | Cat 6_A reference patch cord (1 pc) to check Cat 6 _A patch cord adapter |
| 228038 | Cat 6 reference patch cord (1 pc) for verification of Cat 6 patch cord adapter performance |
| 228039 | Cat 5e reference patch cord (1 pc) for verification of Cat 5e patch cord adapter performance |

High Performance Adapters

Measuring adapters for performance Class F, F_A, I, II and Cat 8

The WireXpert 4500 delivers highly accurate measurements over a wide frequency bandwidth of 1MHz to 2500MHz. This makes it the preferred certifier for various cabling systems such as Class F_A and the standards Cat 8 and Class I & II (2000MHz).



FEATURES

› Class F_A

WireXpert 4500 meets the Level V accuracy specification (ISO/IEC 61935-1 ed.5) required for certifying Class F_A cabling. Class F_A certification is performed over full standards defined frequency range from 1MHz to 1000MHz. Both the TERA and the GG45/ARJ45 interfaces are available through WireXpert test adapters

› Cat 8 and Class I & II

WireXpert 4500 meets the certification requirements for the new performance classes Cat 8 and Class I & II with accuracy class Level VI or 2G. All interfaces available on the market such as RJ45, TERA, MMCpro 3000, GG45 and ARJ45 are supported.

Article number

TERA measurement technology for WireXpert

| | |
|--------|--|
| 228004 | TERA channel measuring adapter Class F_A/Cat 7_A (1 pair) with interface for Class F/F _A channel testing |
| 228051 | TERA channel measuring adapter Class F_A/Cat 7_A (1 pair) with interface for Class F/F _A channel testing including 2m patch cord for "set reference" |
| 228052 | Class F_A TERA permanent link test cord (kit) Contains 1 pair of Class F/F _A TERA permanent link adapters, 1 pair of Class F/F _A TERA permanent link test cords |
| 228005 | TERA permanent link measuring adapter Class F_A/Cat 7_A (1 pair) for Class F/F _A permanent link testing Cable not included - please order separately! |
| 228054 | GG45/ARJ45 channel measuring adapter Class F_A/Cat 7_A (1 pair) suitable for Class F/F _A channel testing, with GG45/ARJ45 patch cord (2m) for "set reference" test cord |
| 228006 | GG45/ARJ45 channel measuring adapter Class F_A/Cat 7_A (1 pair) for Class F/F _A channel testing |
| 228127 | ARJ45 Cat 8.2 channel measuring adapters (1 pair) for measurements up to 2000MHz with ARJ45 jacks without patch cord for "set reference" |
| 228129 | Reference cord for ARJ45 measurement adapter (1 pc) |
| 228123 | MMCpro Cat 8.2 channel measuring adapters (1 pair) for measurements up to 2000MHz with BKS MMC per connection without patch cord for "set reference" |
| 228124 | Reference cord for MMCpro measuring adapter (1 pc) |
| 228180 | TERA Cat 8.2 channel adapters (1 pair) for measurements up to 2000MHz with TERA connection without patch cord for "set reference" |
| 228106 | TERA Cat 8.2 S/FTP test cord for "set reference", 2m (1 pc) |

Coax Adapters

Measuring solution for coaxial cabling with WireXpert

Both one-sided and double-sided tests can be performed. The test limits for insertion loss and return loss can be specified user-specifically.



FEATURES

- › Frequency range of radio frequency measurements: 1 - 2500MHz
- › Autotest: 15 seconds
- › Customizable test limits for insertion loss and return loss
- › Both dual-ended and single-ended tests
- › Test parameters include:
 - Insertion loss v/s frequency
 - Return loss v/s frequency
 - DC resistance
 - Length
- › Measured from both ends in dual-ended mode. For single-ended mode, a remote termination is required
- › Simple one-time reference process for the Local and remote units to pair with each other
- › The eXport software provides full graphical reports including all measurement plots

Article number

228017

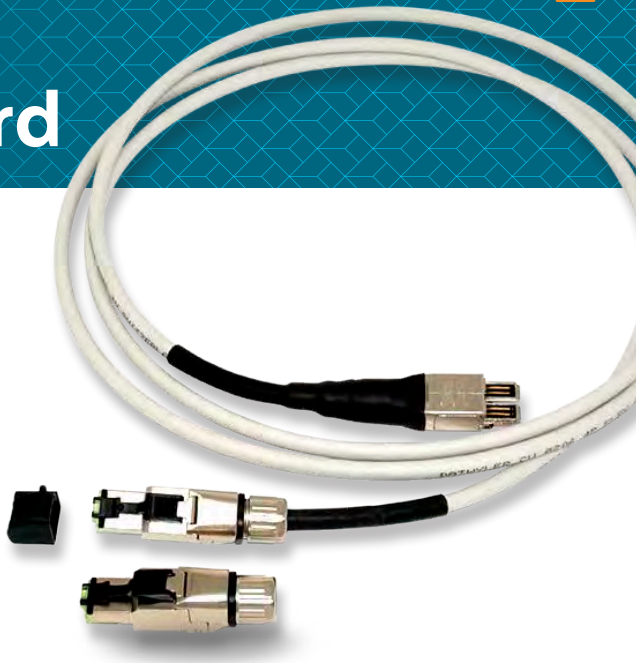
Coax test adapters (1 pair) for WireXpert

Scope of delivery: 2 coax adapters with F-type interface, frequency range from 1 - 2500MHz according to TIA570B, 568C.4

Longlife RJ45 Permanent link test cord

Longlife RJ45 permanent link test cord with interchangeable measuring tips

Longlife test cords are compatible with all copper certifiers of the WireXpert series and enable particularly cost-effective permanent link testing through interchangeable RJ45 plugs.



FEATURES

- › permanent link measurement up to 500MHz in compliance with ISO/IEC, EN, TIA, DIN and more standards
- › RJ45 centered plug compliant to ISO/IEC standards
- › Field replaceable RJ45 plug
- › Extremely short RJ45 plug enables measurements in tight spaces

During permanent link testing, the RJ45 plug of the test cord is the main wearing part, as the RJ45 plugs age over time due to repeated plugging and have to be replaced. Longlife test cords feature a field replaceable RJ45 plug, which can be changed by the customer in just a few minutes. Softing offers the necessary replacement parts. Test cords can also be occasionally damaged in the field, e. g. by being jammed into steel cabinets or equipment cases. A further advantage of the Longlife test cords is that the test cord itself is a comparatively cheap and easy to exchange spare part.

| | |
|----------------|--|
| Article number | Longlife RJ45 permanent link test cord Class E_A/Cat 6A |
| 228295 | Scope of delivery: 1 permanent link test cord for the WireXpert series with replaceable RJ45 measuring tip |
| Article number | Longlife RJ45 measuring tip for RJ45 permanent link test cord |
| 228296 | Scope of delivery: 1 Replacement RJ45 measuring tip for Longlife RJ45 permanent link test cord |

WireXpert in industrial environment

Testing industrial Ethernet cabling with WireXpert

The WireXpert test solution for industrial Ethernet cabling consists of various adapter kits: for testing cabling with two-pair (D-coded) and four-pair (X-coded) M12 as well as RJ45 and other mating faces.



FEATURES

- › Measurement of a wide range of industrial systems with various mating faces according to industrial standards
- › Easy selection of test limits including PROFINET limits
- › Support for user-defined customized test limits
- › Selection of 2-pair or 4-pair configurations
- › Seamless reporting of test results in eXport software
- › Cost-effective replacement of worn test cords or measurement heads using the preLink® system

PreLink® System for End-to-End M12 and RJ45 Links

The Harting preLink® system enables fast and simple adaptation of various connector systems for Industrial Ethernet applications such as PROFINET to the WireXpert family. Only one single measuring adapter is necessary. All connector systems supported by Harting preLink® can be connected to the WireXpert using this adapter with the appropriate test cord and preLink interface.

| Article number | Article description |
|----------------|---|
| 228179 | 1 End-to-End (E2E) adapter with TERA interface for testing Industrial Ethernet cabling such as PROFINET (1 pc) |
| 228153 | 1 E2E test cord TERA to Harting preLink® system |
| 228080 | 1 CAT 7 _A /Class F _A reference cord (2 m) with TERA interface for reference setting |
| 228154 | 1 Interchangeable RJ45 plug for Harting preLink® CAT 6 _A /Class E _A system, IP20 |
| 228155 | 1 M12 D-coded plug for Harting preLink® System Cat 5 |
| 228156 | 1 M12 X-coded plug for Harting preLink® System Cat 6 _A |
| 228157 | 1 M12 D-coded jack for Harting preLink® System Cat 5 |
| 228158 | 1 M12 X-coded jack for Harting preLink® System Cat 6 _A |
| 228159 | 1 Interchangeable V14 push-pull RJ45 plug for Harting preLink® system |
| 228160 | 1 Interchangeable Han® 3A RJ45 plug for Harting preLink® system |
| 228161 | 5 Release tools for Harting preLink® systems |
| 228162 | 1 RJ45 Cat 6 preLink jack, HIFF format for Harting preLink® system, without cable termination block |
| 228171 | Pouch for WireXpert accessories. Compartments for 2 WireXpert adapters, small parts and test cords |
| 228172 | 1 test cord (2m) with TERA and RJ45 jack for measurements on E2E and PROFINET links with RJ45 connectors, consisting of 1 <228153>, 1 <228162> |
| 228173 | 1 test cord (2m) with TERA and M12 D-coded jack for measurements on E2E and PROFINET links with M12 D-coded connectors |
| 228174 | 1 test cord (2m) with TERA and M12 D-coded connectors for measurements on E2E and PROFINET links with M12 D-coded jacks |
| 228175 | 1 test cord (2m) with TERA and M12 X-coded jack for measurements on E2E and PROFINET links with M12 X-coded connectors |
| 228176 | 1 test cord (2m) with TERA and M12 X-coded connector for measurements on E2E and PROFINET links with M12 X-coded jacks |
| 228163 | M12 D-coded test cord kit, contains 1 <228080> reference cord, 2 <228153> test cords TERA to Harting preLink®, 2 <228155> M12 D-coded connectors, 2 <228157> M12 D-coded jacks* |
| 228164 | M12 X-coded test cord kit, contains 1 <228080> reference cord, 2 <228153> test cords TERA to Harting preLink®, 2 <228156> M12 X-coded connectors, 2 M12 <228158> X-coded jacks* |
| 228165 | Harting RJ45 HAN 3A test cord kit, contains 1 <228080> reference cord, 2 <228153> test cords TERA to Harting preLink®, 2 <228160> HAN 3A connectors* |
| 228166 | Harting RJ45 V14 test cord kit, contains 1 <228080> reference cord, 2 <228153> test cords TERA to Harting preLink®, 2 <228159> RJ45 V14 push-pull connectors* |

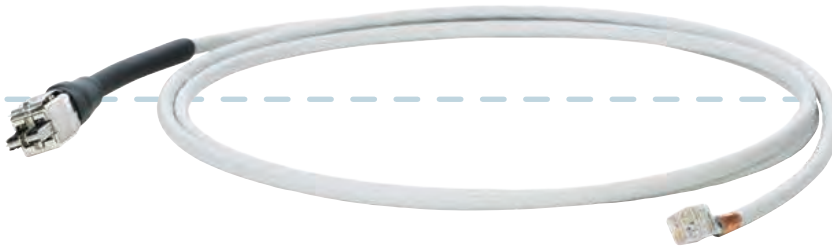
* Please note: Set does not include WireXpert E2E adapter

PreLink® System for End-to-End M12 and RJ45 Links

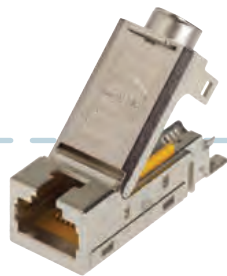
Article no. 228179



Article no. 228153



Article no. 228154



Article no. 228162



Article no. 228159



Article no. 228160



Article no. 228155



Article no. 228157



Article no. 228156



Article no. 228158

Cable Kits

The cable kits always contain a referencing cord and two TERA to preLink® test cords (2m) including the respective measurement heads.

ARTICLE NO. 228163 M12 D-CODED

The M12 D-coded cable kit contains all necessary cables to measure M12 D-coded systems with connectors or jacks.



ARTICLE NO. 228164 M12 X-CODED

The M12 X-coded cable kit contains all necessary cables to measure M12 X-coded systems with plugs or jacks.



Cable Kits

ARTICLE NO. 228165 RJ45 V14

The RJ45 V14 cable kit contains all necessary cables to measure RJ45 systems with jacks.



ARTICLE NO. 228166 RJ45 HIFF

The RJ45 HIFF cable kit contains all necessary cables to measure the RJ45 HIFF systems with jacks.



Further test cords for industrial applications

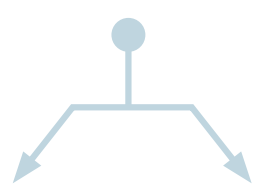
The products described on the following pages consist of test cords with measurement heads for WireXpert series that are not interchangeable.

| Article number | Article Description |
|----------------|--|
| 228169 | 1 x test cord (2m) with TERA and M8 jack for measurements on E2E links with M8 D-coded plugs |
| 228170 | 1 x test cord (2m) with TERA and IX jack for measurements on E2E links with IX plugs |
| 228177 | M8 Test Cord Kit contains 1 x <228080> reference cord, 2 x <228169> test cord TERA to M8 D-coded jack* |
| 228178 | Harting IX test cord kit contains 1 x <228080> reference cord, 2 x <228170> test cord TERA to Harting IX jack* |

* Please note: Set does not include WireXpert E2E adapter



Article no. 228179



Article no. 228169



Article no. 228170

Test cord Kits

ARTICLE NO. 228177



ARTICLE NO. 228178





FIBER QUALIFIERS

NETXPERT XG2

NETXPERT XG2plus

The new generation of Ethernet Speed Certification

New standards defining data rates up to 10Gb/s are a big challenge for latest generation qualifiers. Particularly cabling for wireless access points has to support ever increasing data rates. In order to verify if the cabling installed is able to support the increased data rates, operators need to perform adequate testing before commissioning the network, to avoid any unpleasant surprises.

NetXpert XG2 enables you to meet these new challenges now!



FEATURES

Application:

PASSIVE TESTS

- › Test of IEEE 802.3 compliance for data cabling with link speeds of 10Gb/s
- › Copper cabling:
 - Measures the signal-to-noise ratio (SNR)
 - Carries out a Bit Error Rate Test (BERT)
 - Measures delay skew
 - Combined length measurement performing TDR and capacitance measurements for highly accurate test results and easier troubleshooting even of shorts
 - Full-color wire map shows faults, miswires, reversals, shorts and split pairs in a clear and easy to understand way
- › Fiber optic cabling:
 - Carries out a Bit Error Rate Test (BERT)
 - Evaluates connector endfaces using a fiber microscope
 - Measures the insertion loss
 - LiveLight: real-time optical loss monitoring

ACTIVE ETHERNET TESTS

- › Support of IPv4 and IPv6
- › Detection and integration of VLANs
- › Finds the network participants (Network Discovery)
- › Identifies defective PoE switches by PoE load test up to 90W (Class 8)
- › DHCP test
- › Definition and storage of ping lists
- › LLDP/CDP detection and analysis
- › Trace Route
- › Wi-Fi scan of available access points (2.4GHz, plus 5GHz band with external Wi-Fi dongle)

REPORTING

- › Saves test results and generates test reports
- › Easy data transfer from the device to the PC (via USB)

TEST FOR HIGHEST NETWORK SPEEDS WITH YOUR QUALIFIER

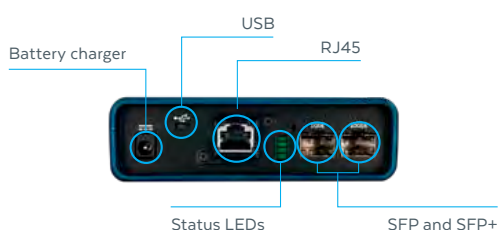
The new NetXpert XG2 verifies if cabling channels support maximum transmission rates of up to 10Gb/s, irrespective of cable categories, patch panels, or outlets installed. NetXpert XG2 provides a precise statement by automatically performing three individual tests and which are combined into an overall test result. By performing a sequence of various tests, the NetXpert XG2 verifies error-free data transmission up to 10Gb/s. The Signal-to-noise ratio (SNR) is measured, followed by a Bit Error Rate Test (BERT) and delay skew test to qualify Gigabit transmission. Delay skew indicates the signal time delay between the wire pairs used. Excessive delay can result in a serious degradation of transmission performance, making it impossible for the receiver to interpret the data stream correctly. Delay skew, just as the signal-to-noise ratio, are considered to be crucial parameters for a reliable data transmission. For fiber optic links, performance is measured by a Bit Error Rate Test (BERT) and the insertion losses of the link.



TROUBLESHOOTING ACTIVE NETWORKS

NetXpert XG2 offers a comprehensive tool set for active network troubleshooting. This includes load tests for voltage drop to verify stability of PoE supplies, identification of the devices connected to the network (Network Discovery), and detection of availability of priority devices (Ping and Traceroute).

MAIN UNIT PORTS



ACTIVE REMOTE PORTS



INCLUDING PORTS FOR FIBER OPTIC TESTS

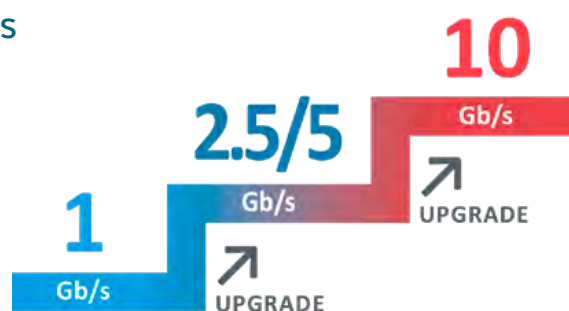
The NetXpert offers full flexibility regardless of whether you are measuring fiber or copper cabling. In the area of passive tests, a throughput test and fiber optic insertion loss test (with NetXpert XG2-PLUS or upgrade with extension set) is also possible.

REPORTING

The NetXpert XG2 offers enough internal memory even for large projects and, if required, generates complete standards-based test reports containing all the necessary information. PDF reports are generated internally, which can be passed on via USB stick.

WELL-EQUIPPED FOR THE CHALLENGES OF THE FUTURE

NetXpert XG2 ensures a future-proof start into the new era of high-speed qualification. The NetXpert series offers simple upgrades to your firmware, and a license system allows for later upgrades to add new features. There are currently three options (1, 2.5/5 and 10Gb/s Ethernet). The purchase of a Step-Up license extends the functionality of the device by one step.



VERSIONS

| Performance levels | 1G | | | | 2.5/5G | | | | 10G | | | | XG2-PLUS | | | |
|--------------------|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|
| | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | |
| 10Gb/s | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| 2.5/5Gb/s | - | - | - | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - |
| 1Gb/s | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| Wi-Fi | ✓ | | - | | ✓ | | - | | ✓ | | - | | ✓ | | - | |

✓ Copper
 ✓ Fiber Optic
 ✓ Wi-Fi

QUALIFIERS



NETXPERT
XG2plus

10
Gb/s

Qualifying copper and fiber cables up to 10Gb/s Ethernet

2.4/5GHz

Active network tests also on Wi-Fi

LiveLight

World novelty:
Trend display of optical transmission loss in real time

Loss

Determination of optical transmission loss

Length

Length determination on copper and fiber cables

Microscope

Fiber connector and evaluation against standards with an optional microscope

ACCESSORIES

Extensive accessories make the NetXpert XG2 the ultimate all-purpose tool.

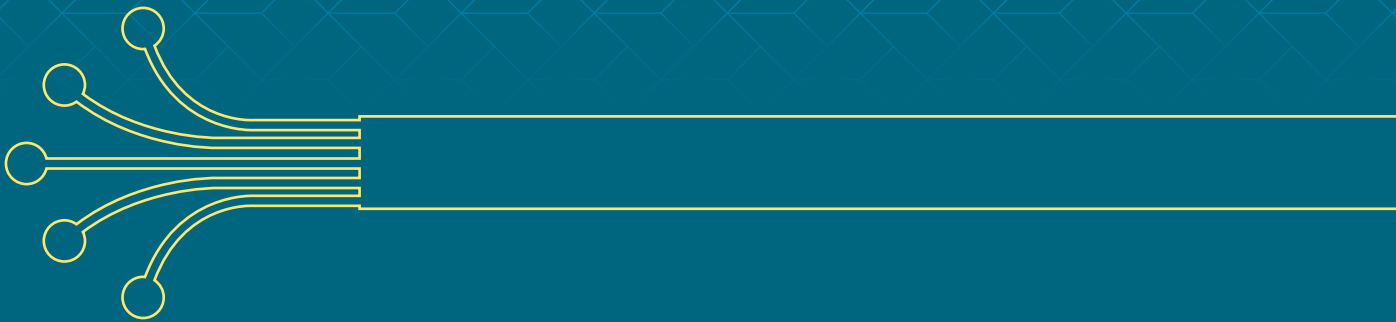
- Individual cables can be connected by combining an integrated tone generator and an external tone probe (e.g. CableProbe CP15, Article no. 226007).
- Port Identifiers (Article no. 226581) facilitate the assignment of the connection ports in case of missing or incorrect labeling. Wiremap Identifiers (Article no. 226528) additionally allow an assessment of the wiring.
- SFP modules are available for carrying out fiber optic tests: multimode 1G (Article no. 400984), singlemode 1G (Article no. 400982), multimode 10G (Article no. 400985) and singlemode 10G (Article no. 400986). A fiber microscope enables inspection of the quality of connector end faces (Article no. 226539)

All wear parts (e.g. RJ45 jack) can be replaced easily and conveniently.

| | |
|----------------------|---|
| Article number | NetXpert XG2 |
| | Scope of delivery: 1 NetXpert XG2 main unit, 1 Active Remote unit, 2 power supplies, 2 RJ45 Cat 6 _A test cables, shielded, 1 hard case, 1 quick start guide |
| 226737 | NetXpert XG2 - 1G |
| 226739 | NetXpert XG2 - 2.5/5G (includes 1 additional upgrade license) |
| 226736 | NetXpert XG2 - 10G (includes 2 additional upgrade licenses) |
| 226555 | License for one upgrade level |
| Article number | NetXpert XG2-PLUS |
| 226735 | Scope of delivery: 2 NetXpert XG2 main units, 1 Active Remote unit, 2 RJ45 Cat 6A patch cords, 2 OM4 LC duplex multimode patch cords, 2 OS2 LC duplex singlemode patch cords, 3 power supplies, copper and fiber couplers, 1 hard case, 4 upgrade licenses, 1 quick start guide |
| Article number | NetXpert XG2 Fiber Extension Kit |
| 226738 | Scope of delivery: 1 NetXpert XG2 main unit, 1 power supply, 2 OM4 LC duplex multimode patch cords, 2 OS2 LC duplex singlemode patch cords, 2 LC couplers, 1 hard case, 1 quick start guide, 2 upgrade licenses (Please order SFP modules separately) |
| Optional Accessories | Wiremap remotes, RJ45 remote identifier set, tone probe CP15, fiber microscope (see page 53), Active Remote unit, suitable SFP modules (for part numbers see above under Accessories) |



FIBER CERTIFIERS



WireXpert Series

The choice is yours. Get on board with one of the WireXpert 500 variants at a reasonable price and choose the version that best suits your field of activity. Certify up to 500MHz with the Cat 6A copper certifier (WireXpert 500) or the fiber-only certifier (WireXpert 500 Fiber-only) or with the combination of Cat 6A copper & fiber certifier in one device (WireXpert 500-PLUS)

And if the requirements change? No worries! All models can be upgraded, eliminating the need to buy a new device. An upgrade to 2500MHz is also possible. Or you can start directly with our premium model: The WireXpert 4500 enables copper and fiber optic certifications up to 2500MHz based on the latest Cat 8, Class I & II standards.

Safe into the future with flexible upgrades

WireXpert
4500

Cat 8

CU

FO

WireXpert
4500pro

UPGRADE

WireXpert
500plus

CU

FO

UPGRADE

WireXpert
500

CU

FO

WireXpert 500

As fiber-only version, WireXpert 500 certifies fiber optic cabling in multimode 850/1300nm and singlemode 1310/1550nm. In addition to fiber optic certification, the device offers the option to connect a video microscope. Auto tests are performed within a few seconds. If required, the WireXpert 500 Fiber-only guides you step-by-step through bidirectional measurements. Also available as pure copper version.

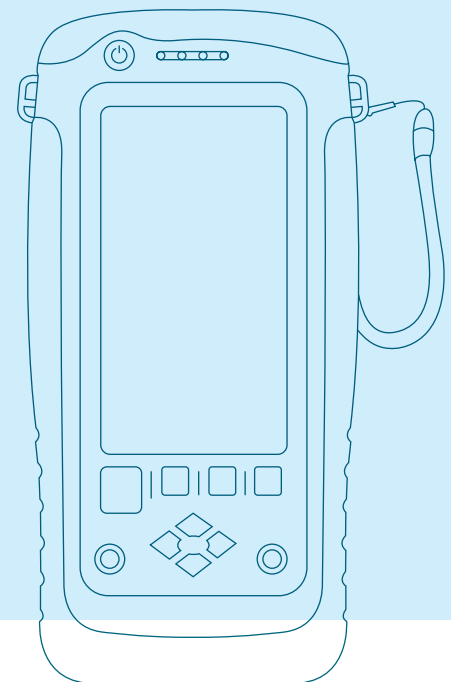
WireXpert 500plus

is the technologically advanced combination model for copper testing up to 500MHz according to Class D/E/E_A, Cat 5e/6/6A standards and for fiber-optic multimode and singlemode testing (850/1300nm and 1310/1550nm). The WireXpert 500-PLUS is compatible with all adapters and can be upgraded to 2500MHz for Cat 8/Class I & II or ISO/IEC Class I & II measurements.

WireXpert 4500

WireXpert 4500pro

makes it possible to certify cabling systems with the highest demands on the company's network or a data center. Extremely fast measurement equipment and the intuitive operation enable the most accurate and fast certification tests.



WireXpert 500

FO



WireXpert 500 Fiber-only: Fiber optic certifier

The WireXpert 500 is a cost-effective certifier for fiber optic cabling. Its innovative concept has been developed to make fiber optic certification tests much easier and faster. Available as multimode-EF version, as well as quad version (MM-EF + SM). As a future-proof investment, the WireXpert 500 can be retrofitted for copper certification as well as for the WireXpert 4500.

FEATURES

Scope of application:   (by upgrade)

- › LAN fiber optic cabling certifier for Tier 1 measurements
- › Tier 1 certifications according to ISO/IEC and TIA 568 C.3, optional evaluation with fiber microscope (see page 53)
- › Options for measuring length and optical loss on singlemode fibers at 1310nm and 1550nm and multimode EF fibers at 850 nm and 1300 nm available
- › Seamless integration of copper cable and fiber optic cable reports into the eXport reporting software, which allows you to create professional guarantee documents and certification reports
- › Double your productivity with DCS™ technology by using each device as an independent fiber certifier

MULTIMODE AND SINGLEMODE TEST KITS

The WireXpert optical loss test kits are available for both multimode and singlemode fiber networks. This modular solution enables measurements on both types of network with the same WireXpert device using interchangeable adapters. With each individual measuring adapter, highly accurate optical loss and length measurements can be carried out at two wavelengths in accordance with the specifications of the different standards. Both test kits are therefore suitable for certification tests on the horizontal and backbone cabling.

QUAD KIT

The WireXpert 500 fiber optic certifier is also available in a QUAD configuration and is supplied in this configuration with a measurement kit with multimode MM-EF modules and singlemode modules (Article no. 228147).

| Article number | WireXpert 500 Fiber-only |
|----------------|--|
| | Scope of delivery: 2 identical handsets (LOCAL and REMOTE) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 headsets, 1 USB stick, 1 quick start guide, 1 soft carrying case |
| 228145 | for multimode cabling incl. 1 multimode-EF module kit (Article no. 228079) |
| 228146 | for singlemode cabling incl. 1 singlemode module kit (Article no. 228003) |
| 228147 | for multimode and singlemode cabling incl. 1 multimode-EF and singlemode module kit (corresponds to Article no. 228079 + 228003) |



WireXpert 500 plus



WireXpert 500-PLUS: Copper and fiber optic certifier

WireXpert 500-PLUS sets a new standard in ease of use for the certification of copper and fiber optic cabling. Local and remote units are equipped with a touch-sensitive color screen. The innovative concept combines measuring accuracy and ease of use with low operating costs. The devices of the WireXpert 500 series are designed for certification up to 500MHz and can be upgraded for the largest possible frequency range of 2500MHz.

FEATURES

Application:  

- › Combined 500 MHz copper and fiber certifier for MM at 850 and 1300nm and for SM at 1310 and 1550nm
- › Reliable certification tests for all standards: Cat 5e/6/6A, Class D/E/E_A
- › Measurement accuracy independently tested by ETL
- › Exceeds ISO and TIA Level IIIe accuracy requirements
- › Can be upgraded directly in the field for many options
 - Adapter for tests on patch cords and cabling such as Industrial Ethernet, Class I and II, coax or fiber
 - Video microscopy
 - Cloud connectivity
 - Comprehensive report and documentation with eXport software
- › The devices of the WireXpert series are versatile and suitable for use in office environments, industrial environments, laboratories and data centers
- › **User-friendly, very robust design**
The WireXpert 500-PLUS has a high-contrast, touch-sensitive LCD color screen with intuitive user guidance and is designed for the constant strain in industry. The Dual Control System (DCS™) simplifies and accelerates the measurement process by providing two identical handheld devices, local and remote
- › **Fast and easy for highest productivity**
The WireXpert performs a Cat 6A/Class E_A and fiber certification test in seconds. It offers intuitive navigation via on-screen menus and generates professional reports using the supplied PC software eXport

WireXpert 500-PLUS can be switched on at any time up to 2500 MHz can be upgraded to perform measurements on twisted pair and coaxial cabling up to Class D, E, E_A, F_A, Class I, II and Cat 5e, 6, 6A, 7A and Cat 8. The upgrade includes 1 year warranty, the software license for Cat 8/Class I and II certification and a calibration certificate.

Article number

WireXpert 500-PLUS

228144

Scope of delivery: 2 identical handheld devices (LOCAL and Remote) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 Class E_A channel adapters, 2 Class E_A permanent link adapters with test cord, 2 speech sets, 1 USB stick, 1 quick start guide, 1 soft carrying case
Optional accessories: Fiber optic microscope (see page 53, Article no. 226539)

WireXpert 4500

WireXpert 4500 *pro*

WireXpert 4500 – the flexible premium model

Modern cable certification for all standards: Class D/E/E_A/F/F_A, Cat 5e/6/6A and the new standards Cat 8, Class I & II.

WireXpert 4500 enables certification of highest performance cabling systems in enterprise networks and data centers with maximum flexibility.

Reliable measurement equipment and the intuitive operation of the WireXpert enable fast and accurate certification tests and improve project productivity.



FEATURES

Application:  

- › Measuring device for certifications up to 2500MHz
- › Modern cabling certification for all standards: Class D/E/E_A/F/F_A, Cat 5e/6/6A/7/7A and the new standard Cat 8 and Class I & II from ISO/IEC
- › Fast autotest in less than 9 seconds
- › Independent verification of measurement accuracy by ETL
- › Meets and exceeds the requirements of ISO Level VI, V, IV, IIIe and TIA Level 2G, IIIe
- › Direct Current Resistance Unbalance (DCRU) measurements for high power PoE (adapters already included with WireXpert 4500-PRO)
- › Supports the extended certification for optical fibers at 850/1300nm (multimode) and 1310/1550nm (singlemode)
- › Can be upgraded directly in the field for many options
 - Adapter for tests on patch cords and cabling such as Industrial Ethernet, Class I and II, coax or fiber
 - Video microscopy
 - Cloud connectivity
 - Comprehensive report and documentation with eXport software

EASY TO USE AND RUGGEDIZED DESIGN

WireXpert comes with high resolution color LCD touch screens and an intuitive touch sensitive user interface, 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 test cycles.

FAST AND EASY FOR MAXIMUM EFFICIENCY

High productivity through fast autotests and short post-processing times. Among the advantages of the WireXpert are the intuitive screen navigation through the individual menus and the eXport reporting software for professional reporting on the PC.

WIREXPRT4500 WIREXPRT4500-PRO

INVESTMENT REMAINS PROTECTED BEYOND 10GBPS

If you are testing 10Gb/s cabling, WireXpert is the clear choice. If you are thinking to go further than 10Gb/s, then WireXpert is the only choice. Built on a future proof, scalable measurement engine, WireXpert 4500 protects your investment in test equipment as data rates supported by the cabling systems increase.

WireXpert 4500 provides various adapters for the certification of cabling systems beyond Cat 6A/Class E_A. The device covers cabling systems of Class F_A up to Cat 8 and Class I and II with the required accuracy. Adapters such as TERA, GG45/ARJ45 and MMCPPro are also available.

PROVEN ACCURACY AND VENDOR APPROVALS

WireXpert has been independently verified by highly respected test laboratories such as ETL. Leading cable and component manufacturers have tested the WireXpert extensively and approved the device for field certifications and associated warranties of their structured cabling solutions.

In fact, major cable vendors are using WireXpert in their labs for qualifying Cat 8 cabling systems under development.



Intertek

| | |
|------------------------------|--|
| <p>Article number</p> | <p>WireXpert 4500</p> |
| <p>228070</p> | <p>Scope of delivery: 2 identical handheld devices (LOCAL and REMOTE) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 Class E_A channel adapters, 2 Class E_A permanent link adapters with test cord, 2 headsets, 1 USB stick, 1 quick start guide, 1 soft carrying case</p> |
| <p>Article number</p> | <p>WireXpert 4500-PRO</p> |
| <p>228280</p> | <p>Scope of delivery: 2 identical handheld devices (LOCAL and REMOTE) with Dual Control System (DCS™), 2 Li-ion batteries, 2 power supplies, 1 calibration certificate, 1 eXport reporting software, 2 Cat 6A+ channel adapters, 2 Cat 6A+ permanent link adapters with test cord, 1 referencing cord, 2 speaker sets, 1 USB stick, 1 quick start guide, 1 soft carrying case</p> |


FiberXpert OTDR

Fiber optic certifier of the extra class

FiberXpert OTDR 5000 was developed especially for installers and operators of corporate networks and is optimized for surveying and documentation of fiber optic networks and for troubleshooting. For both multimode and singlemode fibers, FiberXpert OTDR 5000 offers a very high resolution with one of the smallest dead zones, which allows a standard compliant measurement even of short transmission paths.



FEATURES

Application: 

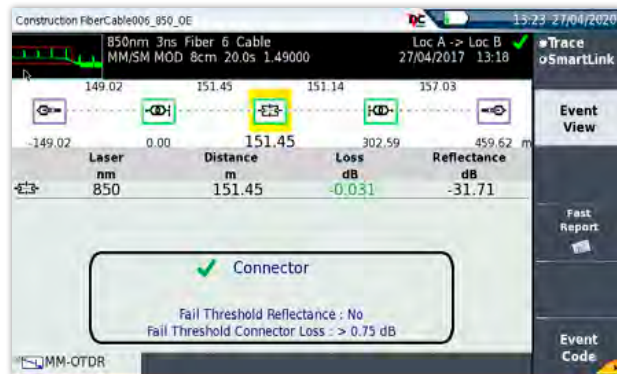
- › Optical reflectometer (OTDR) for multimode (850/1300nm) or combined multimode (850/1300nm) and singlemode (1310/1550nm)
- › Standard-compliant Tier 2 measurement of fiber optic cabling
- › Automated Pass/Fail analysis of the test results according to TIA/IEC limits
- › Display of the OTDR trace in a graphical format for a length-dependent analysis of all events for reflection and attenuation
- › All fiber link events and analysis listed in a table of results
- › Automatic macro-bend detection
- › Built-in optical loss test set
- › Large color touch display
- › Professional measurement protocols with the central eXport reporting software
- › Optional fiber microscope

FiberXpert OTDR 5000 has a high dynamic range and a low dead zone and is specifically designed for measuring relatively short fiber optic distances as used in enterprise networks and data centers. With an event dead zone of less than 80cm, the FiberXpert is able to measure with maximum resolution even short fiber links with the highest accuracy, enabling maximum efficiency in the measurement of the fiber optic distances.

EASY TO USE AND UNDERSTAND

The soft case and shoulder strap (included) leave your hands free to work. This facilitates handling, if you want to measure fiber optic links at different locations without having to set up and dismantle the measurement tool. The results are displayed graphically on the 5" touch screen and can be easily analyzed and stored. Automatic event detection is available, in which all events on the fiber optic line are automatically displayed and evaluated for Pass/Fail.

FIBERXPERT OTDR



SMART LINK MAPPER

With the help of the symbol-based result display, a quick and easy assessment of the measured optical fiber is possible. The individual events on the route are marked with simple, logical symbols and can be selected individually to display detailed measured values for each event. You can choose at any time between Trace and SLM views. Both the SLM and the trace display are included with each device.

ADVANCED MEASUREMENT FUNCTIONS

Further measurement functions, such as measurement of loss and an optical power level analyzer, allow you to exactly measure the link loss and output power of active network components. The optional fiber microscope also allows you to document the quality of link end faces after installation. This is especially helpful in case of warranty or fault.

KEEP AN OVERVIEW OF THE MEASUREMENT RESULTS OF YOUR PROJECTS

Most cabling projects in companies consist of both fiber optic and copper cabling. Therefore it is very convenient that the measurement results of FiberXpert OTDR 5000 can be read into the eXport software. eXport also manages the measurement results of WireXpert – all results of a project are combined in one software.

| Article number | FiberXpert OTDR 5000 |
|----------------|---|
| | Scope of delivery: 1 tester, 1 Li-Polymer battery, 1 power supply, 1 carry case with shoulder strap, 1 IP67 protective case, 1 calibration certificate, 1 eXport reporting software |
| 226534 | Quad multimode/singlemode incl. 1 SC compatible multimode module, 1 SC compatible singlemode module |
| 226535 | multimode incl. 1 SC compatible multimode module |
| 226547 | Quad Pro Kit 1 FiberXpert OTDR 5000 quad (226534), 1 glass fiber microscope (see page 53, 226539) and 1 Visual Fault Locator (see page 52, 226546) |



ADAPTERS ACCESSORIES



Singlemode Adapters

Singlemode fiber optic adapter for measurement of optical loss and length

In a modern network infrastructure, both copper and fiber optic cables are laid at the same location. With the rapidly increasing bandwidth requirements, certification plays a crucial role for guaranteeing data rates. A certification test includes the characterization of each individual fiber link by measuring the insertion loss and length according to the required standards. The WireXpert offers a fast and reliable way to determine the Pass/Fail criteria of the installation according to the applicable standards.



FEATURES

- › Certifies individual optical fibers and duplex fibers with one device
- › Fast 6-second autotest for certification at two wavelengths
- › Easy and fast selection of the test configuration and reference settings
- › Supports 1, 2 or 3 jumpers reference measurements
- › Seamless integration into the eXport reporting software, which also supports copper measurements with the WireXpert
- › Automatic labeling according to common standards
- › Integrated light source and power meter combine two different measuring devices in one
- › Both the main and remote devices can be used to perform independent loopback tests, doubling performance

Article number

228003

Singlemode adapter for WireXpert

Scope of delivery: 2 fiber optic measurement adapters, 2 SC duplex reference test cables, 1 coupling (SC/SC), 1 cleaning set

Multimode-EF Adapters

New generation multimode fiber optic adapters ensures standards-compliant fiber certification

A light source and power meter are used to measure the power loss and length of optical cables at 850 and 1300nm.

Certification of multimode fibers has often proved to be problematic due to the inherent uncertainties in the measurement process. ISO/IEC and TIA have therefore adopted an Encircled Flux (EF) standard that standardizes the launch condition for the light sources used in multimode test equipment. WireXpert's new EF-compliant adapters give you guaranteed compliance to the EF standard IEC 61280-4-1.



FEATURES

- › The Encircled Flux multimode adapters are used for the fully standard-compliant certification of multimode cabling with OM2 to OM5 fibers at 850 and 1300nm
- › The TX side of the adapter is equipped with FC connectors and the RX side of the adapters is equipped with exchangeable connectors for testing SC and LC cabling
- › The standard kit is supplied with SC connectors. LC cable and adapter kits are available for measurements on LC cabling
- › Conforms to EF standard IEC-61280-4-1 and to standard IEC-14763-3
- › Robust interchangeable SC, LC and ST adapters
- › Improves the reproducibility of the measurements
- › Reduces the variance when measuring insertion loss between laboratory and field measuring devices
- › Troubleshooting using the built-in Visual Fault Locator (VFL)
- › Validates glass fibers from different manufacturers with different mode behavior

Article number

Multimode-EF measuring adapter for WireXpert

228079

Multimode fiber optic measurement module for certification testing on duplex fibers at 850/1300nm

Scope of delivery: 2 encircled flux modules, 2 mode-transparent test cables (FC-SC), 2 duplex reference test cables (SC-SC), 1 cleaning set, 1 duplex coupler (SC/SC)

228089

LC test test cord kit for Encircled Flux-compatible multimode adapters

Scope of delivery: 2 mode-transparent test cables (FC-LC), 2 simplex reference test cables (LC-LC), 2 interchangeable measuring ports (LC), 2 duplex couplers (LC-LC)

228088

Reference test cables

Scope of delivery: 2 mode-transparent FC-SC reference test cables, 2 duplex reference test cables SC-SC

Visual Fault Locator

VFL 5000: Fiber Visual Fault Locator

VFL 5000 is used for continuity testing and fault location on optical fibers and components in singlemode and multimode. Depending on the application, a range of more than 5 km can be achieved. A universal adapter allows the connection of all common 2.5mm optical connector systems. An adapter for 1.25mm ferrules is also available. The operating time in flashing mode is approx. 40 hours.



FEATURES

- › Detection of mechanical damage to the fiber
- › Fiber end detection
- › Luminous range of 5km maximum (typical and under normal lighting conditions)
- › Generates visible laser light at a wavelength of approx. 635nm (red).
- › With an output power of less than 1mW, the laser safety rating of the device is Class II (IEC 60825-1:2014)

Due to its compact and rugged design, the Visual Fault Locator is ideally suited for daily use in all fiber optic applications, e.g. in data centers, in the field, in industrial environments and in laboratories. The Visual Fault Locator is characterized by several practical features, such as its special roll-proof shape, the captive dust and shock protection cap and its extremely robust housing. The Visual Fault Locator is easy to operate with just one hand and is powered by standard AAA batteries. The practical belt loop allows for hanging the VFL 5000 at any time if required.

Article number

226540

Multimode EF measuring adapter for WireXpert

VFL5000

Scope of delivery: Red laser light with 2.5mm ferrule, extra rugged design

226542

Adapter 2.5mm to 1.25mm Ferrule for VFL5000

226546

VFL5000 Set with adapter 2.5 to 1.25 mm ferrule

Consists of Article no. 226540 + 226542

Fiber optic microscope



Digital fiber microscope for checking the connector end faces

Before testing fiber-optic links and each time fiber optic connectors are mated, connector end faces should be inspected and evaluated to avoid contamination that can cause degradation of network performance and destructive damage in the contact zone. The new fiber microscope provides for a quick and easy inspection of connector end faces and an automated Pass/Fail evaluation according to IEC 61300-3-35. The microscope is easily connected via USB with WireXpert or FiberXpert and the evaluation of connector endfaces can be added to the test reports.

FEATURES

- › Inspection and evaluation of the connector end face with just one keystroke
- › Automatic evaluation according to IEC 61300-3-35
- › Easy handling and fast analysis
- › Adapters for the most common fiber-optic connectors included in the delivery

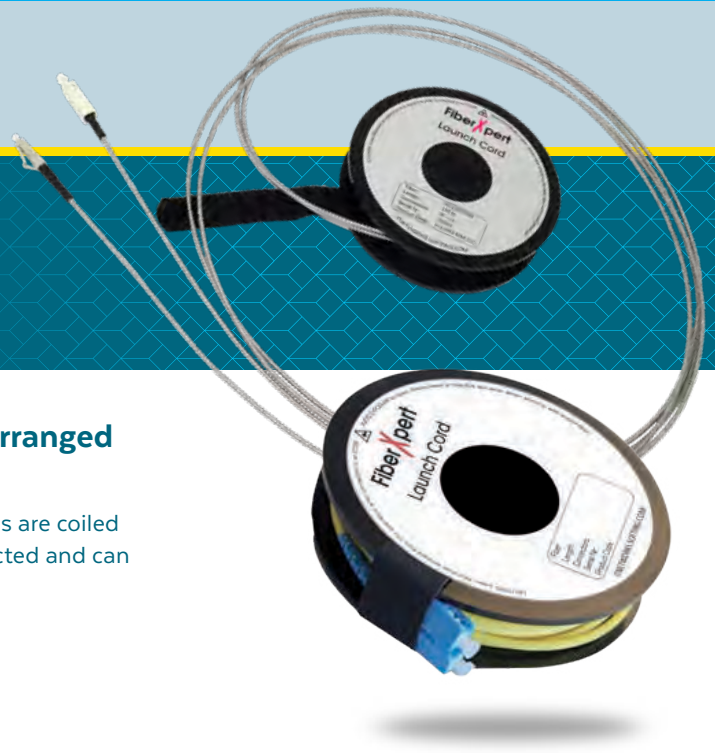
Article number

226539

Digital fiber microscope

Scope of delivery: 1 digital fiber microscope, various tips suitable for the most common connectors (SC-/FC-/LC-/U12M-/U25M)

FiberXpert Launch Cord



Multimode and singlemode launch cords neatly arranged and ready to use

FiberXpert launch cords ensure order in the measuring case. The cords are coiled gently and can be easily rolled up and stored. The fiber itself is protected and can be stored in the hard case of the FiberXpert OTDR 5000.

FEATURES

- › Optimum protection of your launch cord
- › Singlemode and multimode launch cords available
- › Heavy duty version with metal-armored cords available
- › The most common connector combinations available

Article number

400930/400939/400940
400932/400941/400942
400976/400977/400991
400992/400992/400993

FiberXpert Launch Cord

Launch Fiber Eco multimode SC/LC/ST 150 meters each
Launch Fiber Eco singlemode SC/LC/ST 300 meters each
Launch Fiber Heavy Duty multimode SC/LC/ST 150 meters each
Launch Fiber Heavy Duty singlemode SC/LC/ST 500 meters each



ETHERNET



CableMaster 600/650





The comfort model

CableMaster 600 is a cable tester for network, telephone, and coax cabling, equipped with an RJ45 jack for network cables and connector for coax cables. The CableMaster 600 verifies the wire map, determines the cable length and distance to fault. The results can be saved and further processed using the PC reporting software. Adding to this, the CableMaster 600 offers extensive troubleshooting features such as cable tracing, link detection up to 1Gb/s, PoE testing and socket allocation by remote units.

CableMaster 600 is the ideal test device for professional installers and network operators who need to test RJ45 and coaxial cabling and document the correct wiring and cable lengths in test protocols.

CableMaster 650 consists of the CableMaster 600 including extensive accessories.

FEATURES

Application:  

- › Tests network and coaxial cabling (RJ45 and F coaxial connector)
- › Graphic display of the wire map for quick troubleshooting
- › Determines cable length and distance to fault by means of full TDR measurement
- › Cable tracing and end device detection with cable/port ID remote units
- › PoE detection and load test
- › Link test up to 1Gb/s to determine link status and speed
- › High-contrast color display guarantees good readability in any environment
- › Test report and documentation with PC reporting software



CableMaster 600 cabling and network tester is a versatile tool for testing the cabling and allocating outlets to the patch panel during installation, or for troubleshooting during network operation. The test results are displayed on the full-color graphic screen in a clear and easy to understand way.

CableMaster 600 enables quick identification of network ports, while identifying possible link capability and link status. In addition, the PoE availability (Power over Ethernet) is displayed and can be checked with a load test compliant with IEEE 802.3 af/at.

| | |
|-----------------------|---|
| Article number | CableMaster 600 |
| 226515 | Scope of delivery: 1 CableMaster 600, 1 remote unit, 2 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carry case Optional accessories: tone probe e.g. CableProbe CP15 (<i>Article no. 226007</i>) |
| Article number | CableMaster 650 |
| 226516 | Scope of delivery: 1 CableMaster 600, 1 tone probe CableProbe CP15, 8 remote units, 1 RJ45 cable/alligator clip, 20 coax identifier remotes (1-20), 9 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carrying bag |

CableMaster 800/850



Professional cable and network tester with extended test functionality for network, telephone and coaxial cables

CableMaster 800 is a professional cabling tester equipped with an RJ45 jack for network cables and an F-type connector for coaxial cables. It verifies the wire map and cable lengths as well as distance to the fault. The results can be saved and further processed using the PC reporting software. The CableMaster 800 also offers extensive network diagnostic features for troubleshooting, such as link detection up to 1Gb/s, ping, network discovery, PoE tests and much more.

CableMaster 850 consists of the CableMaster 800 including accessories.



FEATURES

Application:  

- › Tests network and coaxial cabling (RJ45 and F coaxial connector)
- › Graphic display of the wire map for quick troubleshooting
- › Measures cable length and distance to fault using full TDR measurement
- › Cable tracing and end device detection with cable/port ID remote units
- › PoE detection and load test
- › Link test up to 1Gb/s to determine link status and speed
- › Pings single or lists of IPv4 and IPv6 addresses and any URL on the Internet
- › Network Discovery creates lists of broadcasted devices
- › CDP/LLDP/NDP and VLAN detection
- › High-contrast color display guarantees good readability in any environment
- › Test report and documentation with PC reporting software

CableMaster 800 features extensive test capabilities for RJ45 network, telephone and coaxial cabling. Consisting of a handheld and a test/ID remote unit, the CableMaster 800 is the perfect tool to test RJ45 cabling, displaying the results in a wire map format on a full-color graphical display. It verifies continuity, tests for shorts, opens, reversals, miswires, and split pairs. Cable length and distance to fault can be measured with the built-in full TDR (Time Domain Reflectometer).

CableMaster 800 can feed a modulated audio signal into the cabling, which can be used with an optional tone probe for cable detection or allocation. Numbered cable ID remotes allow the user to easily identify which outlet is connected to the appropriate patch panel port.



The CableMaster 800 enables rapid identification of network ports while displaying link capability and current link status. With added network discovery features, any broadcasted devices in the network can be discovered and displayed and saved as a list. Pinging of individual or lists of IPv4 and IPv6 addresses as well as any URL shows their accessibility.

Identifies CDP/LLDP/NDP and VLAN to quickly give the user information about the network configuration. In addition, PoE (Power over Ethernet) availability is displayed and can be checked with a load test compliant with IEEE 802.3 af/at.

| | |
|-----------------------|---|
| Article number | CableMaster 800 |
| 226520 | Scope of delivery: 1 CableMaster 800, 1 remote unit, 2 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carrying bag Optional accessories: tone probe e.g. CableProbe CP15 (<i>Article no. 226007</i>) |
| Article number | CableMaster 850 |
| 226521 | Scope of delivery: 1 CableMaster 800, 1 tone probe CableProbe CP15 (<i>Article no. 226007</i>), 8 remote units, 1 cable RJ45 / alligator clip, 20 coax identifier remotes (1 - 20), 9 RJ45 cables, 6 AA batteries, 1 micro USB cable, 1 carrying bag |

NETXPERT XG2

NETXPERT XG2plus

The new generation of Ethernet Speed Certification

New standards defining data rates up to 10Gb/s are a big challenge for latest generation qualifiers. Particularly cabling for wireless access points has to support ever increasing data rates. In order to verify if the cabling installed is able to support the increased data rates, operators need to perform adequate testing before commissioning the network, to avoid any unpleasant surprises.

NetXpert XG2 enables you to meet these new challenges now!



FEATURES

Application:

PASSIVE TESTS

- › Test of IEEE 802.3 compliance for data cabling with link speeds of 10Gb/s
- › Copper cabling:
 - Measures the signal-to-noise ratio (SNR)
 - Carries out a Bit Error Rate Test (BERT)
 - Measures delay skew
 - Combined length measurement performing TDR and capacitance measurements for highly accurate test results and easier troubleshooting even of shorts
 - Full-color wire map shows faults, miswires, reversals, shorts and split pairs in a clear and easy to understand way
- › Fiber optic cabling:
 - Carries out a Bit Error Rate Test (BERT)
 - Evaluates connector endfaces using a fiber microscope
 - Measures the insertion loss
 - LiveLight: real-time optical loss monitoring

ACTIVE ETHERNET TESTS

- › Support of IPv4 and IPv6
- › Detection and integration of VLANs
- › Finds the network participants (Network Discovery)
- › Identifies defective PoE switches by PoE load test up to 90W (Class 8)
- › DHCP test
- › Definition and storage of ping lists
- › LLDP/CDP detection and analysis
- › Trace Route
- › Wi-Fi scan of available access points (2.4GHz, plus 5GHz band with external Wi-Fi dongle)

REPORTING

- › Saves test results and generates test reports
- › Easy data transfer from the device to the PC (via USB)

TEST FOR HIGHEST NETWORK SPEEDS WITH YOUR QUALIFIER

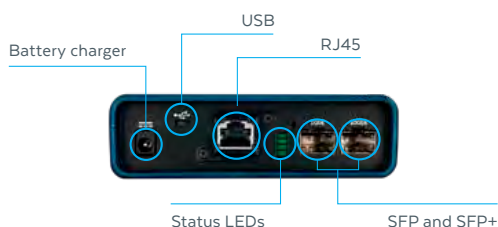
The new NetXpert XG2 verifies if cabling channels support maximum transmission rates of up to 10Gb/s, irrespective of cable categories, patch panels, or outlets installed. NetXpert XG2 provides a precise statement by automatically performing three individual tests and which are combined into an overall test result. By performing a sequence of various tests, the NetXpert XG2 verifies error-free data transmission up to 10Gb/s. The Signal-to-noise ratio (SNR) is measured, followed by a Bit Error Rate Test (BERT) and delay skew test to qualify Gigabit transmission. Delay skew indicates the signal time delay between the wire pairs used. Excessive delay can result in a serious degradation of transmission performance, making it impossible for the receiver to interpret the data stream correctly. Delay skew, just as the signal-to-noise ratio, are considered to be crucial parameters for a reliable data transmission. For fiber optic links, performance is measured by a Bit Error Rate Test (BERT) and the insertion losses of the link.



TROUBLESHOOTING ACTIVE NETWORKS

NetXpert XG2 offers a comprehensive tool set for active network troubleshooting. This includes load tests for voltage drop to verify stability of PoE supplies, identification of the devices connected to the network (Network Discovery), and detection of availability of priority devices (Ping and Traceroute).

MAIN UNIT PORTS



ACTIVE REMOTE PORTS



INCLUDING PORTS FOR FIBER OPTIC TESTS

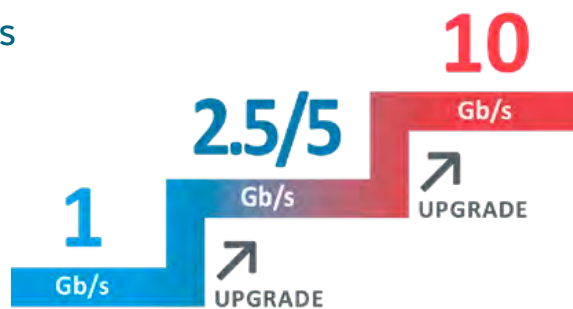
The NetXpert offers full flexibility regardless of whether you are measuring fiber or copper cabling. In the area of passive tests, a throughput test and fiber optic insertion loss test (with NetXpert XG2-PLUS or upgrade with extension set) is also possible.

REPORTING

The NetXpert XG2 offers enough internal memory even for large projects and, if required, generates complete standards-based test reports containing all the necessary information. PDF reports are generated internally, which can be passed on via USB stick.

WELL-EQUIPPED FOR THE CHALLENGES OF THE FUTURE

NetXpert XG2 ensures a future-proof start into the new era of high-speed qualification. The NetXpert series offers simple upgrades to your firmware, and a license system allows for later upgrades to add new features. There are currently three options (1, 2.5/5 and 10Gb/s Ethernet). The purchase of a Step-Up license extends the functionality of the device by one step.



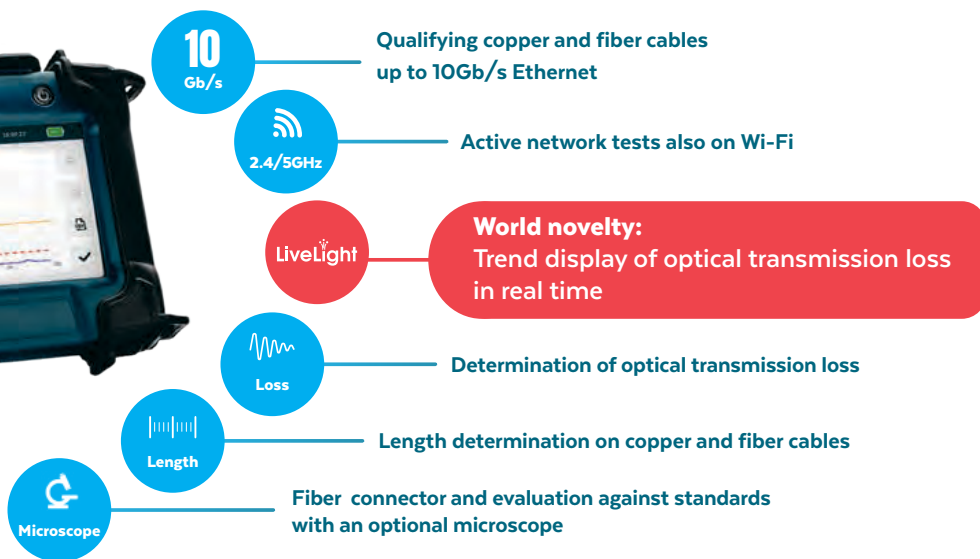
VERSIONS

| Performance levels | 1G | | | | 2.5/5G | | | | 10G | | | | XG2-PLUS | | | |
|--------------------|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|----------------------|---|-----------------------|---|
| | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | | Active Network Tests | | Passive Qualification | |
| 10Gb/s | - | - | - | - | - | - | - | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| 2.5/5Gb/s | - | - | - | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - |
| 1Gb/s | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| Wi-Fi | ✓ | | - | | ✓ | | - | | ✓ | | - | | ✓ | | - | |

✓ Copper
 ✓ Fiber Optic
 ✓ Wi-Fi



NETXPERT
XG2plus



ACCESSORIES

Extensive accessories make the NetXpert XG2 the ultimate all-purpose tool.

- Individual cables can be connected by combining an integrated tone generator and an external tone probe (e.g. CableProbe CP15, Article no. 226007).
- Port Identifiers (Article no. 226581) facilitate the assignment of the connection ports in case of missing or incorrect labeling. Wiremap Identifiers (Article no. 226528) additionally allow an assessment of the wiring.
- SFP modules are available for carrying out fiber optic tests: multimode 1G (Article no. 400984), singlemode 1G (Article no. 400982), multimode 10G (Article no. 400985) and singlemode 10G (Article no. 400986). A fiber microscope enables inspection of the quality of connector end faces (Article no. 226539)

All wear parts (e.g. RJ45 jack) can be replaced easily and conveniently.

| | |
|----------------------|---|
| Article number | NetXpert XG2 |
| | Scope of delivery: 1 NetXpert XG2 main unit, 1 Active Remote unit, 2 power supplies, 2 RJ45 Cat 6 _A test cables, shielded, 1 hard case, 1 quick start guide |
| 226737 | NetXpert XG2 - 1G |
| 226739 | NetXpert XG2 - 2.5/5G (includes 1 additional upgrade license) |
| 226736 | NetXpert XG2 - 10G (includes 2 additional upgrade licenses) |
| 226555 | License for one upgrade level |
| Article number | NetXpert XG2-PLUS |
| 226735 | Scope of delivery: 2 NetXpert XG2 main units, 1 Active Remote unit, 2 RJ45 Cat 6A patch cords, 2 OM4 LC duplex multimode patch cords, 2 OS2 LC duplex singlemode patch cords, 3 power supplies, copper and fiber couplers, 1 hard case, 4 upgrade licenses, 1 quick start guide |
| Article number | NetXpert XG2 Fiber Extension Kit |
| 226738 | Scope of delivery: 1 NetXpert XG2 main unit, 1 power supply, 2 OM4 LC duplex multimode patch cords, 2 OS2 LC duplex singlemode patch cords, 2 LC couplers, 1 hard case, 1 quick start guide, 2 upgrade licenses (Please order SFP modules separately) |
| Optional Accessories | Wiremap remotes, RJ45 remote identifier set, tone probe CP15, fiber microscope (see page 53), Active Remote unit, suitable SFP modules (for part numbers see above under Accessories) |


LANEXPERT 80

Cabling and network tester – for network, telephone and coaxial cables

LanExpert 80 combines all essential test functions for an Ethernet network in a single compact, rugged and very easy-to-use handheld device. The device is easily operated via a color touch screen and combines complete test and analysis functions in one portable, robust device. The operator receives a Pass/Fail statement, regardless of the category of the cables or connectors installed.



FEATURES

Application: 

- › Cable test, wire map, length and PoE
- › VoIP analysis of operational data and VoIP quality
- › Detection of network devices such as switch/router and end-user
- › Packet detection and recording for analysis with Wireshark® (10 000 data packets)
- › Protocol analysis with statistics and experts including IPv4/IPv6 support
- › Traffic generator and stress test according to RFC 2544
- › Network test using ping, traceroute and hub activation
- › Graphical display of network statistics

The LanExpert Inline mode allows users to non-intrusively monitor network traffic. It can identify protocols, port usage, VoIP statistics and network utilization for data rates of up to 1000 BaseTX, for example. Each of the LanExpert's two RJ45 ports can perform ping, link, traceroute, DHCP and discovery functions to quickly and easily detect connectivity problems in the network.

On the physical layer, it can perform Power over Ethernet voltage and current tests to measure the standard-compliant power consumption of connected PoE devices. Testing the LAN cabling for short circuits, breaks, split pairs and reversals is no problem for the LanExpert 80. Measurements of the cable length and a tone generator for tracing cable locations round off the physical measurement functions.

It also provides a stress test that generates traffic and measures performance metrics according to RFC 2544. The stress test can be conducted using the two independent ports on a single unit or using a second unit located remotely on a network.

Article number

226020

LanExpert (LE80) – 2 x Fixed 10/100/1000 BaseT Interface

Scope of delivery: 1 handset with color touch screen, 1 carry case, 1 remote termination, 1 memory stick (contains software and manual), 1 charger



Wi-Fi



NETXPERT XG2

NETXPERT XG2plus

The new generation of Ethernet Speed Certification

New standards defining data rates up to 10Gb/s are a big challenge for latest generation qualifiers. Particularly cabling for wireless access points has to support ever increasing data rates. In order to verify if the cabling installed is able to support the increased data rates, operators need to perform adequate testing before commissioning the network, to avoid any unpleasant surprises.

NetXpert XG2 enables you to meet these new challenges now!



FEATURES

Application:

PASSIVE TESTS

- › Test of IEEE 802.3 compliance for data cabling with link speeds of 10Gb/s
- › Copper cabling:
 - Measures the signal-to-noise ratio (SNR)
 - Carries out a Bit Error Rate Test (BERT)
 - Measures delay skew
 - Combined length measurement performing TDR and capacitance measurements for highly accurate test results and easier troubleshooting even of shorts
 - Full-color wire map shows faults, miswires, reversals, shorts and split pairs in a clear and easy to understand way
- › Fiber optic cabling:
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ACTIVE ETHERNET TESTS

- › Support of IPv4 and IPv6
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- › Wi-Fi scan of available access points (2.4GHz, plus 5GHz band with external Wi-Fi dongle)

REPORTING

- › Saves test results and generates test reports
- › Easy data transfer from the device to the PC (via USB)

TEST FOR HIGHEST NETWORK SPEEDS WITH YOUR QUALIFIER

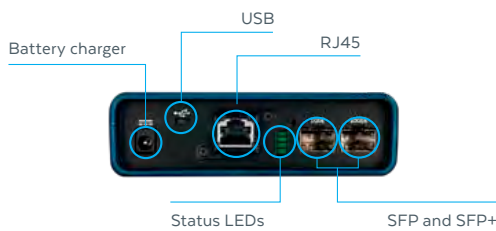
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NETXPERT XG2

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ACTIVE REMOTE PORTS



INCLUDING PORTS FOR FIBER OPTIC TESTS

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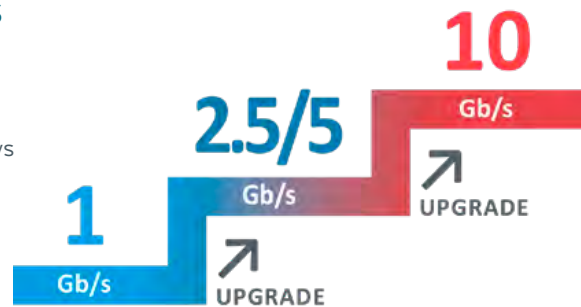
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There are currently three options (1, 2.5/5 and 10Gb/s Ethernet). The purchase of a Step-Up license extends the functionality of the device by one step.



VERSIONS

| Performance levels | 1G | | | | 2.5/5G | | | | 10G | | | | XG2-PLUS | | | | |
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| 2.5/5Gb/s | - | - | - | - | ✓ | - | ✓ | - | - | ✓ | - | ✓ | - | ✓ | - | ✓ | - |
| 1Gb/s | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ |
| Wi-Fi | ✓ | | - | | ✓ | | - | | ✓ | | - | | ✓ | | - | | - |

✓ Copper
 ✓ Fiber Optic
 ✓ Wi-Fi



NETXPERT
XG2plus

10
Gb/s

Qualifying copper and fiber cables
up to 10Gb/s Ethernet

2.4/5GHz

Active network tests also on Wi-Fi

LiveLight

World novelty:
Trend display of optical transmission loss
in real time

Loss

Determination of optical transmission loss

Length

Length determination on copper and fiber cables

Microscope

Fiber connector and evaluation against standards
with an optional microscope

ACCESSORIES

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- Port Identifiers (Article no. 226581) facilitate the assignment of the connection ports in case of missing or incorrect labeling. Wiremap Identifiers (Article no. 226528) additionally allow an assessment of the wiring.
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WaveXpert



Wi-Fi Network Sniffer

Network engineers who analyze network communication in today's modern Wi-Fi networks (high density, industry, universities, hospitals, with often up to layer 7 "application" in the OSI layer model), have to collect Wi-Fi data, store data packets and analyze data frames. WaveXpert is a convenient tool for the simultaneous recording of several Wi-Fi channels according to IEEE 802.11 a/b/g/n/ac standards.

FEATURES

Application: 

- › Captures in monitoring mode the important management frames (incl. radio tap header)
- › Multi-channel, multi-MIMO acquisition
- › Visibility of roaming processes
- › Saves captures in PCAP format (with Wireshark®)
- › 4 Wi-Fi cards with 16 antennas in one tidy case
- › With 20Gb/s Thunderbolt interface
- › 4 channels (up to 8 with 2 devices) can be recorded simultaneously
- › MIMO 3 x 3 or 4 x 4*
- › Maximum channel width: 20/40/80MHz or 20/40/80/160*MHz
- › Wi-Fi standard: 802.11 a/b/g/n/ac or 802.11 a/n/ac*
- › Frequency: 2.4GHz & 5GHz or 5GHz*

*WaveXpert 2

WHAT IS RECORDED - HOW DATA IS COLLECTED

The special feature of WaveXpert is that not only user data but also management and control information is received loss-free and stored for further analysis. The unit operates in passive mode only, meaning Wi-Fi transmissions are only received and nothing is sent.

The WaveXpert is designed as a peripheral device for PCs, which have a Thunderbolt™ 3 interface. The data collected by the WaveXpert is transmitted via the Thunderbolt™ 3 interface to the PC and is stored in the PC's memory. There the data can be displayed and analyzed with Wireshark.



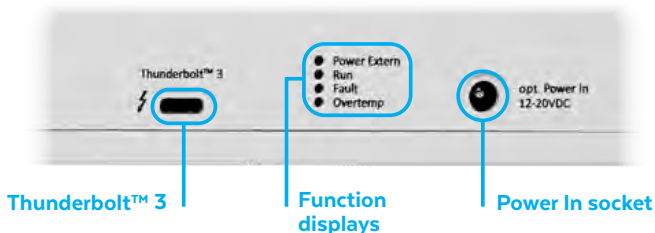
SOFTWARE/CONFIGURATION

For the operation and configuration of the WaveXpert, such as for example the definition of the reception channels or of the channel bandwidth, a user interface with a Linux Live operating system on the PC is supplied.



CONNECTORS

The Thunderbolt connector supplies the WaveXpert with power and sends data to the PC. If an external power supply is connected, “Power Extern” lights up. The external power supply via “opt. Power In” is necessary at maximum load, e.g. when connecting 2 devices. “Fault” and “Overtemp” indicate faults.



EXTERNAL POWER CONNECTION

In order to conserve the laptop’s battery life and to operate the WaveXpert with larger channel bandwidths, the WaveXpert can be supplied via an external power supply. You can use powerbanks, which supply a voltage between 12 and 20V. Devices for additional charging of laptops can be used for this purpose. The plug of the external power supply, must be compatible with the power socket of the WaveXpert.

| | |
|--|--|
| <p>Article number</p> <p>226559</p> | <p>WaveXpert 1 - Wi-Fi Sniffer for 2.4GHz & 5GHz, 802.11a/b/g/n/ac, 3x3 MIMO, Wave1, parallel recording on up to 4 channels</p> <p>Scope of delivery: WaveXpert 1 (2.4GHz & 5GHz), carry case, Thunderbolt cable, USB stick with LiveLinux and software</p> |
| <p>Article number</p> <p>226560</p> | <p>WaveXpert 2 - Wi-Fi Sniffer for 5GHz, 802.11a/n/ac, 4x4 MIMO, Wave2, parallel recording on up to 4 channels</p> <p>Scope of delivery: WaveXpert 2 (5GHz), carry case, Thunderbolt cable, USB stick with LiveLinux and software</p> |



CLOUD

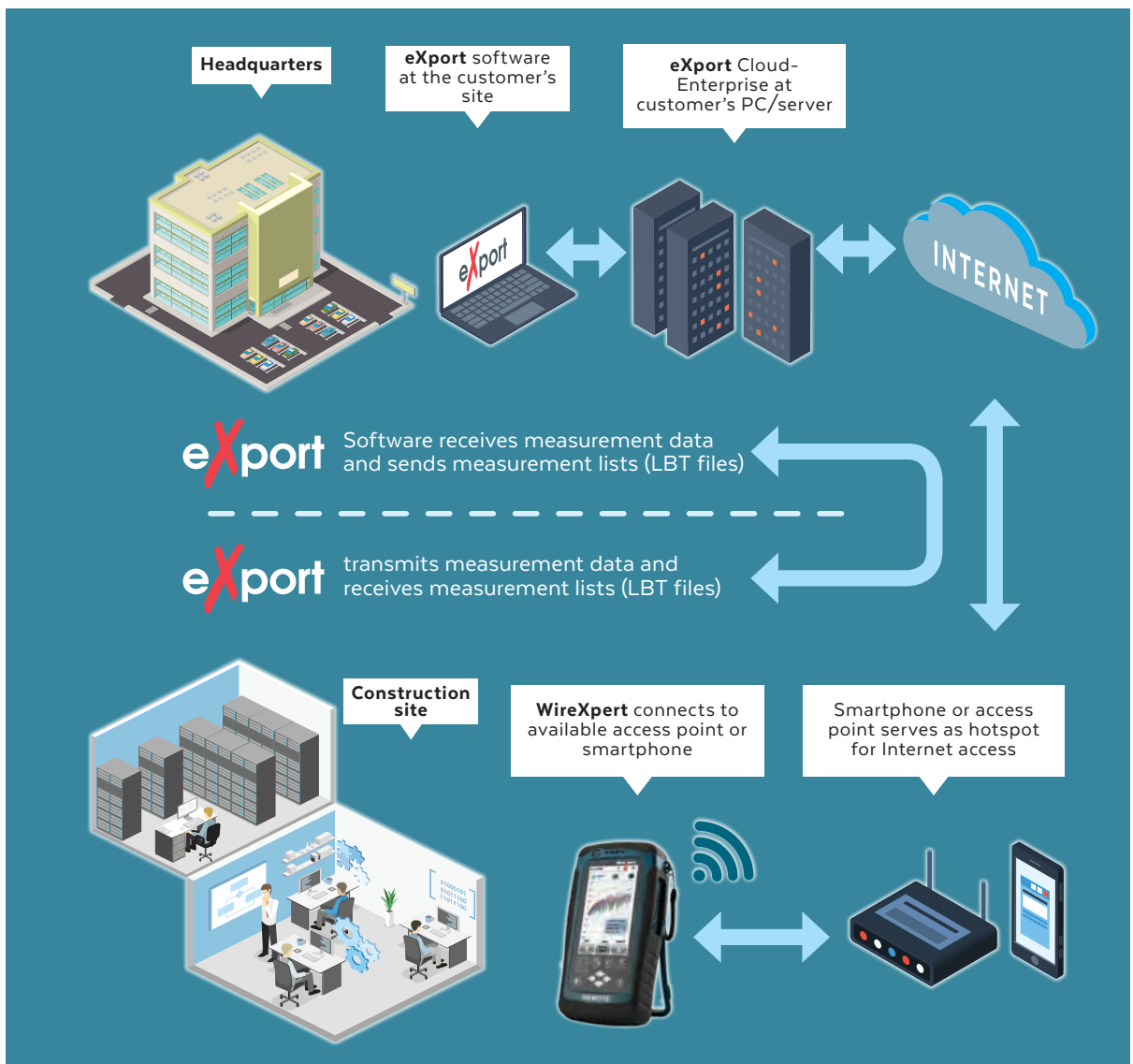


eXport Cloud Enterprise

CLOUD CONNECTION OF THE WIREXPERT SERIES TO ENTERPRISE NETWORKS

- › With eXport Cloud Enterprise you operate your own cloud based platform for the exchange of measurement data and LBT files (List-Based-Testing) of your WireXpert series. Project managers can use this software to obtain measurement data from various installation teams via the Internet and to control measurement projects.
- › Unique: eXport Cloud Enterprise is installed on your own company network and is therefore not dependent on third-party cloud services.
- › The customer owns the server software and all data are stored on the customer's own network.

FUNCTIONAL OVERVIEW



EXPORT CLOUD ENTERPRISE

- › There are no monthly costs as with SaaS (Software as a Service) products.
- › Only minimal hardware requirements in your own company network are necessary. As hardware, a standard mini PC or laptop or server with Windows 10 is sufficient.
- › Any existing WireXpert can also be retrofitted with this function.
- › The WireXpert can use standard access points or smartphones with Hotspot function for Internet connection.
- › Any number of WireXpert devices or users can be connected to an eXport Cloud Enterprise installation.
- › The software allows project control by means of different roles (project manager and technician).

ITNETWORKS.SOFTING.COM/CLOUD



Article number

Server license for eXport Cloud Enterprise

228233

Scope of delivery: 1 server license for eXport Cloud Enterprise



SERVICE

XpertCare



Premium Support for your WireXpert

Long downtimes of a measuring device caused by unexpected defects can inconveniently delay the schedule of a project and increase the budgeted maintenance costs. To keep these effects under control, we developed the XpertCare Support Program for the WireXpert and its fiber modules. It contains a complete package for annual calibration, maintenance (including an interim device in the event of an unexpected device failure) and the replacement of the wearing parts for your WireXpert beyond the standard warranty.

THE XPERTCARE SUPPORT PROGRAM

To protect the investment in a cable certifier, it is necessary to maintain and service it regularly. If you use your WireXpert near continuously and are worried about downtimes, the XpertCare Support Program is just right for you. XpertCare offers much more than the standard warranty and protects your investment in the best possible way.

WHAT DOES THE XPERTCARE SUPPORT PROGRAM INCLUDE?

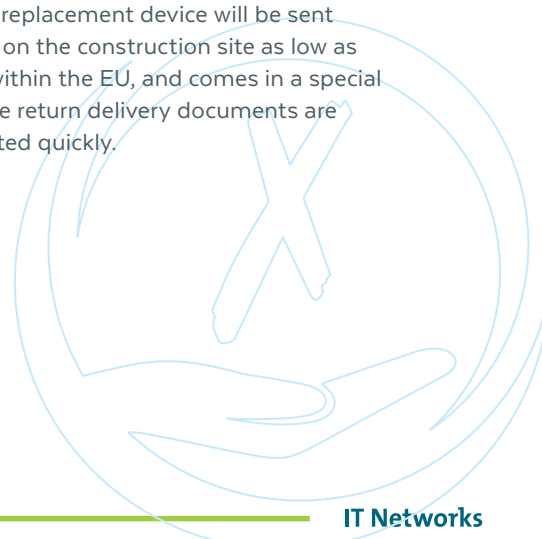
› Annual calibration and inspection – including firmware updates

The XpertCare Support Program includes an annual recalibration of the WireXpert devices or, if applicable, the fiber optic modules in our local service center. This gives you the certainty that the required accuracy is always maintained during measurement. The calibration interval depends on the validity period of the specifications and the operating environment. Typical interval for LAN certification devices is 1 year. The most recent calibration date is stored in the instrument and can be printed on the results report to guarantee customers that the required accuracies are maintained at a glance.

In addition, all accessories and functions of the devices are checked in the service center and the device firmware is updated.

› Preferential treatment in case of repair – including a replacement unit to bridge the time until repair

If a user reports a damage case under the XpertCare Support Program, a replacement device will be sent to him as soon as possible free of charge in order to keep the downtimes on the construction site as low as possible. The replacement unit is generally sent within one working day within the EU, and comes in a special transport case which is then used directly to return the defective unit. The return delivery documents are already enclosed with the shipment to ensure that the process is completed quickly.





› Replacement service for wearing parts

Some accessories are subject to wear due to plugging in the connectors. These include the channel link adapters, permanent link adapters and permanent link test cords. Batteries and headsets are also subject to wear. If these accessories are found to be defective or worn, you will receive a replacement immediately. Up to 6 individual parts can be replaced per year under the XpertCare Support Program. Adapter and test cords are only available in pairs, which corresponds to two parts. In some cases, you may be asked to return the defective/worn accessory for inspection before the replacement is sent out.

The models of the WireXpert



WireXpert
500

WireXpert
500plus

WireXpert
4500

Fiber-optic modules of WireXpert



Multimode



Multimode-EF



Singlemode

XpertCare – Overview

Extensive support program protects against long downtimes and unplanned repair costs

| WireXpert | |
|--|------------------|
| 1st year | 2nd and 3rd year |
| Repairs (covered under warranty) | Repairs |
| Annual inspection (checking and calibration) | |
| Wear parts | |
| Loaner device | |
| WireXpert fiber optic modules | |
| 1st year | 2nd and 3rd year |
| Repairs (covered under warranty) | Repairs |
| Annual calibration | |
| Loaner device | |





HOW TO ACCESS THE SERVICES OF THE XPERTCARE SUPPORT PROGRAM?

Should your WireXpert unexpectedly require repair service, please contact us in one of these ways:

- Go to the web address of the XpertCare request form:
itnetworks.softing.com/service-request
- Fill in the missing information and send the form.
- Contact us by telephone and discuss the further procedure. Please have your XpertCare number ready.
+49-89-456 56 660

FOR WHICH DEVICES IS THE XPERTCARE SUPPORT PROGRAM AVAILABLE?

The XpertCare Support Program is available for all models of the WireXpert series and the corresponding fiber optic modules. The contract can be concluded for a period of one, two or three years. Renewal within the period of validity is possible.

The best time to purchase a contract is when devices are newly ordered. Devices that have already been in the field for an extended period (> 90 days) must be inspected in the local Service Center before validation for the XpertCare Support Program and must have a valid calibration. The inspection is free of charge. Devices older than 5 years are not eligible for the XpertCare Support Program.

The XpertCare Support Program does not apply in case of intentional damage or misuse.

WHAT DOES THE XPERTCARE CERTIFICATE CONTAIN?

The XpertCare certificate contains the agreement number, product details for the device, Softing's contact details and the period of validity. You will also receive contact details for the contact persons you can turn to in case of need.

**For more information about our Xpert Care program please contact us at
INFO.ITNETWORKS@SOFTING.COM or ITNETWORKS.SOFTING.COM**



for WireXpert

Extend the warranty for your WireXpert

In the first year after the purchase of a WireXpert/the appropriate modules, the standard warranty comes into effect if defects are found. You can also protect your purchase in the following years with our unique 3-Year Warranty extension. This means that you will receive the usual warranty services for 36 months instead of 12. This warranty extension can only be activated at the time of purchase for a fee. This option is available for the WireXpert as well as for the WireXpert modules.

WHAT SERVICES DOES THE 3-YEAR WARRANTY* COVER?

When you purchase the warranty extension, you will receive a checkbook that proves that the inspections have been carried out.

You can buy an extension up to a maximum of 3 years open purchase of a device. This extension can only be requested in the form of a warranty extension with the following conditions and scope:

- Register your warranty extension with your data, the device data and the serial number by e-mail to info.itnetworks@softing.com and
- send your device to our Service Center for an annual inspection (additional fees will be charged)

If a defect occurs in the three years following the purchase of the WireXpert, this additional warranty will protect you.

ANNUAL INSPECTION: CALIBRATION AND DEVICE CHECK INCLUDING FIRMWARE UPDATE

A condition for the warranty extension is the purchase of an annual inspection of the WireXpert device (and, if applicable, the fiber optic modules) at the local service center for a fee, in order to be able to always maintain the required accuracy during measurement. The most recent calibration date is stored in the instrument and can be printed on the results report to guarantee the customer that the required accuracy is maintained at a glance. In addition, all accessories and functions of the devices are checked in the service center and the device firmware is updated to the latest version.

* Notwithstanding Clause 11.2 sentence 1 of the General Terms and Conditions of Softing IT Networks GmbH, the period within which you can assert your claims shall be one year from delivery or acceptance and shall be extended by another year in each case to a maximum of 36 months from delivery or acceptance. With regard to the extended warranty period, provided that (i) you register the object of the contract by e-mail with Softing IT Networks GmbH and keep it registered there at least until the end of the warranty period specified above at and (ii) you send the object of the contract to Softing IT Networks GmbH for an annual inspection (with inspection and calibration) at the expense of Softing IT Networks GmbH during the warranty period specified above in each year from the date of delivery or acceptance. Otherwise, the General Terms and Conditions of Softing IT Networks shall continue to apply unchanged.



3-Year Warranty - Overview

| 1st year | 2nd and 3rd year |
|----------------------------------|------------------|
| Repairs (covered under warranty) | Repairs |
| Inspection (fee required) | |

HOW DO YOU ACCESS THE PROGRAM SERVICES?

Should your WireXpert unexpectedly require repair service, please contact us in one of these ways:

- Please send us an e-mail to support.itnetworks@softing.com
- Please contact us by telephone and discuss the further procedure: **+49-89-456 56 660**

FOR WHICH DEVICES IS THE EXTENDED 3-YEAR WARRANTY AVAILABLE?

The option of extending the warranty to 3 years is available for all models of the WireXpert series and the corresponding fiber optic modules. The term of the contract can be concluded for a period of 2 years, which builds on the first year (standard warranty). The contract can only be concluded when new equipment is purchased. The warranty does not apply in case of intentional damage or misuse.

WHAT DOES THE 3-YEAR WARRANTY CERTIFICATE CONTAIN?

The 3-Year Warranty certificate contains the contract number, the product data of the devices, the customer's contact data and the term. You will also receive details of the contact persons you can get in touch with if necessary.

WE ARE THERE FOR YOU!

Put your trust in the expert and reliable service of Softing IT Networks. We support you all the way: Our competent service team based in Haar near Munich is always there for you when you need technical support. We are known by our customers for this excellent service.

For more information regarding our 3 years warranty extension please contact us:
INFO.ITNETWORKS@SOFTING.COM



HEADQUARTER

Softing IT Networks GmbH

Richard-Reitzner-Allee 6

85540 Haar, Germany

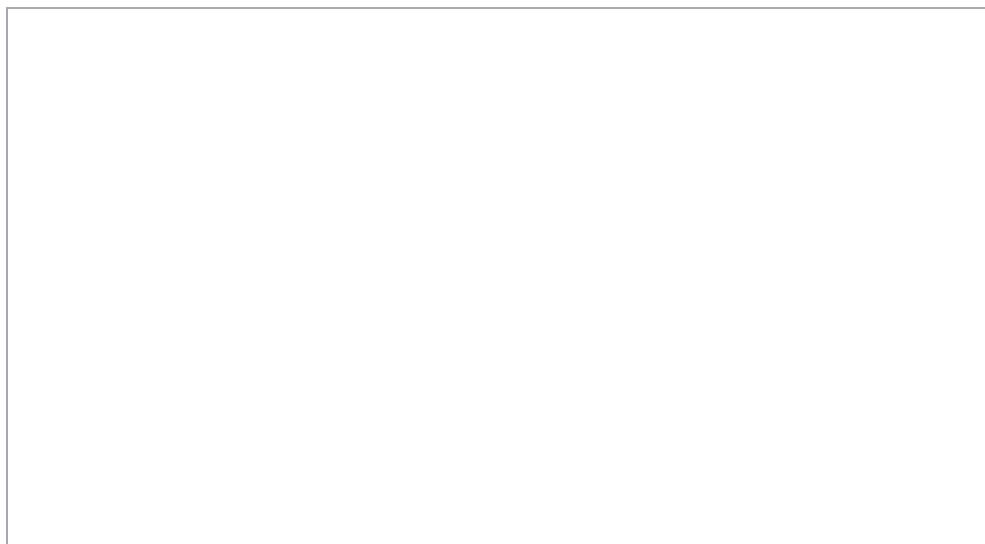
☎ +49 89 45 656 660

✉ info.itnetworks@softing.com

itnetworks.softing.com

Find your local distributor:

itnetworks.softing.com/contact



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