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## SPECIFICATIONS

| | |
|---|---|
| Ethernet Speed Certification | 100Mbit/s - 10Gbit/s via Copper Twisted Pair cabling<br>1 Gbit/s, 10Gbit/s via fiber SFP-ports |
| Length Measurement Technology | Time-Domain Reflectometry (TDR) and capacitance |
| Cable Measurements | Cable Testing and ID: up to 1,000ft (305m)<br>Split Pair Detection: 3ft (1m) to 1,000ft (305m)<br>Length Measurement: 0 to 1,500ft (457m), ± (5%+1ft (30cm))<br>Distance to fault: 0 to 656ft (200m) ± (5% + 3ft (1m))<br>Supports 8 wiremap remotes (RJ 45) and 24 RJ-45 ID only remotes |
| Power over Ethernet (PoE) | Test supports IEEE 802.3af PoE (Type 1, max 15.4W),<br>IEEE 802.3at PoE+ (Type 2, 30W) and 802.3bt PoE++<br>(Type 3, 60W) |
| Active Ethernet | Network and test support by interface:<br>Copper RJ-45 interface –<br>100/1,000/2,500/5,000/10,000Mb/sec link speeds<br>Fiber SFP+ #1 interface supports 10Gb/sec link speed<br>Fiber SFP #2 interface supports 1Gb/sec link speed<br>WiFi 802.11 a/b/g/n/ac 2.4Ghz WiFi and Bluetooth |
| Maximum Voltages | Maximum voltage that can be applied to any 2 connector pins<br>without causing damage to the tester:<br>RJ-45: 60VDC or 50VAC |
| Save Test Results | 16GB memory allows storing more than ten thousand cable<br>or network tests |
| Tone Generation | Tone Frequencies: 730Hz and 1440Hz |
| Languages | English, German, French, Spanish, Italian |
| Battery | Li-Ion, 7.2VDC, 3.1A-hr<br>5 hours typical |
| Temperature | Operating: 14 to 140°F (-10 to 60°C)<br>Storage: -22 to 158°F (-30 to 70°) |
| Humidity | 10 to 90% non-condensing |
| Enclosure | Injection molded plastic |
| Display | 7" Color TFT-LCD capacitive touch display,<br>1024x600 resolution (WSVGA) |
| Size | 9.6x6.9x2.8 inch  (245x177x73 mm) (Main Unit)<br>5.1x6.9x2.1 inch (130x177x55 mm) (Active Remote) |
| Weight with Battery | 2,65lbs (1,2kg) (Main Unit)<br>1,33lbs (0,6kg) (Active Remote) |

### DELIVERY

1  NetXpert Main Unit
1  Active Remote
2  Power supplies
2 Test cables
1 Hard case
1 Micro-USB adapter

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**LAN QUALIFIER**
FROM 100MBIT/S UP TO 10GBIT/S

**IT Networks**

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The NetXpert XG generates detailed or summarized result-reports in PDF- or CSV-format with your company logo. The reports can be exported from your device via a USB stick.

# The generation of "Ethernet Speed Certification"

New standards defining data rates up to 10Gbit/s are 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.
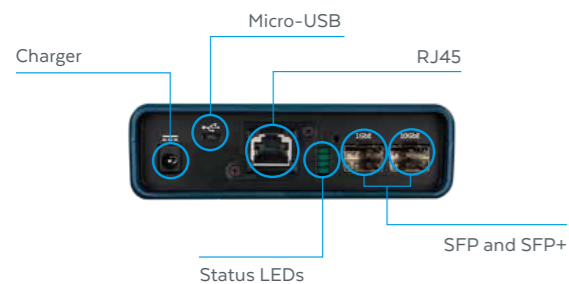
NetXpert XG enables you to meet the new challenges now!

Extensive accessories turn NetXpert XG into the ultimate multi-tool – from locating individual cables with the built-in tone generator or the Remote Identifiers, to generating test documentation and in-service troubleshooting of PoE networks.

### GET FASTER RESULTS

The simple one touch autotest can be initiated either from the main unit or from the Active Remote, saving time spent for walking between outlets and reducing the overall working time. When troubleshooting, all cable tests can be performed individually to minimize fault-finding time.

## TEST FOR HIGHEST NETWORK SPEEDS WITH YOUR QUALIFIER

The new NetXpert XG verifies, if cabling channels support maximum transmission rates of up to 10Gbit/s, irrespective of cable categories, patch panels, or outlets installed. NetXpert XG provides a precise statement by automatically performing three individual tests which are combined into an overall test result.

By performing a sequence of various tests the NetXpert XG verifies error-free data transmission up to 10Gbit/s. Determination of Signal-to-noise ratio (SNR) followed by a Bit Error Rate Test (BERT) and delay skew test 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.

To perform a network discovery test, the main device must be connected to a switch.

### WELL-EQUIPPED FOR THE CHALLENGES OF THE FUTURE

NetXpert XG ensures a future-proof start into the new era of high-speed qualification. The NetXpert series offers simple firmware upgrades, and a license system allows for later upgrades to add new features. There are 3 options (NetXpert 1G, NetXpert 2.5/5G and NetXpert XG). The purchase of an upgrade license always extends the functionality of the device one step upwards.

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

### MAIN UNIT PORTS

Micro-USB

Charger

RJ45

SFP and SFP+

Status LEDs

### ACTIVE REMOTE UNIT PORTS

Micro-USB

Charger

RJ45

### PERFORM CABLE TESTS

- Tests data cabling for IEEE 802.3 compliance at data rates of up to 10Gbit/s
- Bit Error Rate Test (BERT)
- Signal-to-noise ratio (SNR)
- 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 opens, shorts, miswires, and split pairs in a clear and easy to understand way
- Saves test results and generates standards-based measurement reports providing "Pass/Fail"

### INCLUDING PORTS FOR FIBER OPTIC MEASUREMENTS

The NetXpert offers full flexibility regardless of whether you are measuring fiber or copper cabling. Using its available SFP/SFP+ ports, various active fiber tests such as protocol detection (CDP/LLDP), network ping test and network discovery can be performed. In the area of passive tests, qualification of fiber optic cabling will be possible by connecting one main unit at each end.
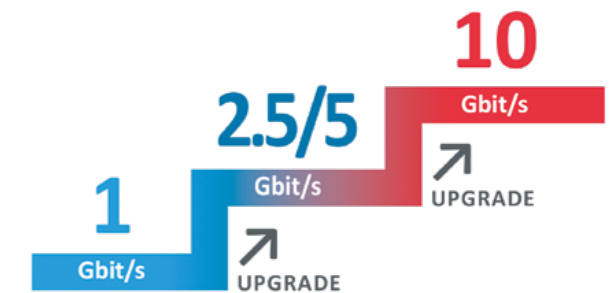
### ACTIVE NETWORK MANAGEMENT

- All network tests via copper, fiber optics and WLAN possible
- Supports IPv4 and IPv6
- Detection of duplicate IP addresses in the network
- Discover your network and see the connected network devices
- Identifies defective PoE switches with a PoE load test
- DHCP test
- Ping lists can be defined and saved for later use
- LLDP/CDP detection and analysis
- Identifies VLANs present in your network
- Data transfer from the tester to the PC using USB stick

### TROUBLESHOOTING OF ACTIVE PoE/ PoE+/++ NETWORKS

For active PoE network troubleshooting, NetXpert XG additionally offers a comprehensive tool set. This includes load tests for voltage drop to verify stability of PoE supplies, identification of the devices connected to the network, and detection of availability of priority devices.

NetXpert XG offers sufficient internal storage even for large projects and, if required, generates complete standards-based test reports containing all the necessary information.

### USER-FRIENDLY OPERATION

Continuity test results of all 8 wires and the shielding are displayed in wire map format in full color, while showing cable faults such as opens, shorts, miswires, and split pairs in a clear and easy to understand way. NetXpert determines the cable length and the distance to faults performing full TDR (Time Domain Reflectometer) measurement in combination with a capacitance measurement for increased accuracy.

The large high-resolution touch screen display facilitates work not only in daylight but also in poor lighting conditions, while the 7" touch screen provides sufficient space to ensure excellent readability of the displayed test results.

**10** Gbit/s

**2.5/5** Gbit/s

UPGRADE

**1** Gbit/s

UPGRADE