

# NetXpert XG

optimize!  
**softing**



Copper



Fiber

## LAN QUALIFIER

## The new generation of “Ethernet Speed Certification”

New standards defining data rates up to 10Gb/s are a big challenge for the qualifiers of the latest generation. Particularly cabling for wireless access points has to support the 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!

## Test for highest network speeds with your qualifier

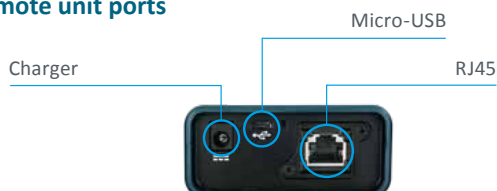
The new NetXpert XG verifies, if cabling channels support maximum transmission rates of up to 10Gb/s, irrespective of the category of cables, patch panels, or outlets installed. NetXpert XG provides a precise statement by automatically performing three individual tests which are combined into an overall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

By performing a Bit Error Rate Test (BERT) and standards-based tests as per IEEE 802.3an the NetXpert XG verifies the error-free data transmission up to 10Gb/s. The tests include further parameters that can impact a Gigabit transmission, such as signal-to-noise ratio (SNR) and delay skew. 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.

### Main unit ports



### Active Remote unit ports



## 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.

## High-resolution 7-inch touch screen

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.

## Getting results faster

An 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.

## Ruggedized casing with hanging straps

Equipped with hanging straps at both sides, the NetXpert XG allows for one-handed use, leaving the right/left hand free to connect the NetXpert XG to the next cabling channel under test.



## Troubleshooting of active PoE++ networks

For the troubleshooting of active PoE++ networks, 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 measurement reports containing all the necessary test information.

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

## 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.

## Fiber

### Including ports for fiber optic measurements

The NetXpert offers full flexibility regardless of whether you are measuring fiber or copper cabling. Using the 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, a throughput test of the fiber optic cabling is also possible.

### Technical features at a glance

- Tests data cabling for IEEE 802.3 compliance at data rates of up to 10Gb/s (BERT)
- Determines 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“

### Network and diagnosis

- Supports IPv4 and IPv6
- 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

## Specifications

Length Measurement Technology	Time-Domain Reflectometry (TDR) and capacitance
Cable Measurements	Cable Testing and ID: up to 1,000 ft (305 m) Split Pair Detection: 3 ft (1 m) to 1,000 ft (305 m) Length Measurement: 0 to 1,500 ft (457 m), ± (5%+1ft (30 cm)) Distance to fault: 0 to 656 ft (200 m) ± (5% + 3ft (1m)) 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), IEEE 802.3at PoE+ (Type 2, 30W) and 802.3bt PoE++ (Type 3, 60W) Future proofed for IEEE 802.3bt Type 4 100W higher-power PoE
Active Ethernet	Network and test support by interface: Copper RJ-45 interface – 100/1,000/2,500/5,000/10,000 Mb/sec link speeds Fiber SFP+ #1 interface supports 10Gb/sec link speed Fiber SFP+ #2 interface supports 1Gb/sec link speed WiFi 802.11 a/b/g/n/ac 2.4/5 Ghz WiFi and Bluetooth
Maximum Voltages	Maximum voltage that can be applied to any 2 connector pins without causing damage to the tester: RJ-45: 60 VDC or 50 VAC
Save Test Results	Stores unlimited cable or network tests with user defined names per project
Tone Generation	Tone Frequencies: 730 Hz and 1440 Hz
Languages	English, German, French, Spanish
Battery	Li-Ion, 7.2 VDC, 3.1A-hr (typical) Battery Life at 10Gb: 8 hrs minimum, 24 hrs stand-by
Temperature	Operating: 14 to 140° F (-10 to 60°C) 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, 1024x600 resolution (WSVGA)
Size	245 x 177 x 73 mm (main unit) 130 x 177 x 55 mm (Active Remote)
Weight with Battery	1,2 kg (main unit) 0,6 kg (Active Remote)

## Delivery

1 x NetXpert Main Unit	2 x Test cable
1 x Active Remote	1 x Hard case
2 x Power supply	1 x Micro-USB adapter

## Models

- 12-1256 - NetXpert XG 1Gbit Unit
- 12-1257 - NetXpert XG 2,5Gbit Unit
- 12-1258 - NetXpert XG 10Gbit Unit
- 12-1259 - Upgrade NetXpert XG one step

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