



GIGABIT LAN QUALIFIER WITH NETWORK DIAGNOSTIC TOOL

The NetXpert 1400 provides a complete solution for cable qualification and troubleshooting of active networks, enabling rapid, simple verification and documentation of the capability of cabling links to support Gigabit Ethernet operation compliant with the IEEE 802.3ab standard. Irrespective of the category of cables and connectors installed, a “Pass/Fail” result indicates whether the existing cabling can support data rates up to 1Gbit/s.



## Cable Testing and Ethernet Speed Certification

The NetXpert 1400 is a cost-effective alternative for installers and operators of network cabling systems where qualifying cabling bandwidth up to Gigabit Ethernet is sufficient. The NetXpert allows users to verify whether cabling links will support a maximum data rate of up to 1Gbit/s irrespective of the category of the cables, patch panels, or outlets installed.

Performing standards-based tests with real data as per IEEE 802.3ab and bit error rate tests (BERT) the NetXpert 1400 tests the error-free data transmission at 100Mbit/s or 1Gbit/s.

Adding to this, parameters affecting signal quality can be displayed including signal-to-noise ratio (SNR) and delay skew. Delay skew in a 4-pair cable indicates the signal time delay between pairs and can impact Gigabit Ethernet performance.

Continuity test results of all 8 wires and the shielding are displayed in wire map format in full colour while showing cable faults such as opens, shorts, miswires, and split pairs in a clear and easy to understand way. Cable length and distance to the cable fault are determined using advanced TDR (Time Domain Reflectometer) technology.

The results can be saved in the NetXpert 1400 and full colour reports can be generated for documentation purposes.

## Features

- Testing network cabling and coaxial cabling
- Tests data cabling for IEEE 802.3 compliance at transmission rates of up to 1Gbit/s (BERT)
- Determines signal-to-noise ratio (SNR)
- Determines delay skew
- Determines pair lengths and distance to fault performing full TDR measurement
- Full-colour wire map shows opens, shorts, miswires, and split pairs
- Results can be saved in the tester, and standards-based measurement reports providing "Pass/Fail" results can be generated



# Cable Qualifier

## Network Testing and Diagnosis

Featuring a bundle of network testing capabilities, the NetXpert 1400 assists you with verifying network configuration and troubleshooting networks as any moves, adds & changes (MACs) performed will require a renewed verification.

The NetXpert 1400 verifies, when connected to a communications outlet, if a link can be established to the switch and which connection speeds are supported (up to 1Gbit/s). The Ping test detects the availability of individual and lists of IPv4 and IPv6 addresses and any user-selectable URLs.

On top of this, the user can choose from a range of other network tests, such as LLDP/CDP/NDP and VLAN discovery and comprehensive PoE (Power over Ethernet) tests, including a load test.

- Link test up to 1 Gbit/s to identify link capability and link status
- Ping to a single or lists of IPv4 and IPv6 addresses (IPv6 planned) as well as any URL on the internet
- CDP/LLDP/NDP and VLAN discovery
- PoE / PoE+ detection and load test for voltage drop
- DHCP test
- Traceroute
- Switch Port identification by blinking the port LED

## Full-colour, Easy-to-Use Touch Screen

The full-colour touch screen and another 4 buttons make the NetXpert 1400 easy to use while the high-resolution colour screen guarantees excellent readability in any environment. Its ruggedized design is ideally suited for rough handling environments. The generation of detailed test reports and documentation is possible directly on the device.



Kit includes	Quantity
NetXpert Main Unit	1
Active remote	1
Power supply	2
4 GB SD card	1
Micro USB cable	1
Network and coax remote set (each #1-5), F-conn coupler	1 set
Network patch cable	2
Sacrificial cable	2
Hanging strap and clip	1
Hard carrying case	1

IPv6 available end 2015

## Specification

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), $\pm$ (5%+1ft) Distance to fault: 0 to 200 m $\pm$ (5% + 1m) Supports 8 continuity and ID numbers remotes (RJ 45) Supports 20 RJ 45 and 20 F connector ID only remotes
Power over Ethernet	Tests for IEEE 802.3af and IEEE 802.3at (PoE +) compliant PoE Tests for classes and loads cable up to 25.5 watts (at class 4 Identifies Mode A or B (pairs with PoE))
Active Ethernet	Indicates advertised speeds of 10/100/1000 base-T half or full duplex Can Link to network at 10/100 base-T
Maximum Voltage	Parameters refer to the maximum voltage that can be applied to any 2 connector pins without causing damage to the tester. - RJ Jack: 66 Vdc or 55 Vac - F-connector: 50 Vdc or Vac
Save Test Results	Stores up to 250 Cable or network tests with user defined names per project
Tone Generation	Tone Frequencies: 730 Hz and 1440 Hz
Languages	English, French, German
Battery	Li-Ion Akku, 7,2 VDC, 5,500 mA-hr (typical) Battery Life - Linked @ 1Gb - 1 hrs min., 20 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	High-strength PC/ABS plastic with VO rating with boot Withstands 4 foot (1,20m) drop on to concrete
Display	3,5" Color Touch Screen Display
Size	6 x 10 x 23 cm
Weight	With batteries: 1 lb 12 oz 508 g)

For more information please contact:



Direktronik AB tel. 08-52 400 700 [www.direktronik.se](http://www.direktronik.se)