



IDEAL NETWORKS



# LanXPLORER Pro

Network Troubleshooter with Bandwidth Monitoring  
and Performance Diagnostics

Proof of Performance

# LanXPLORER Pro



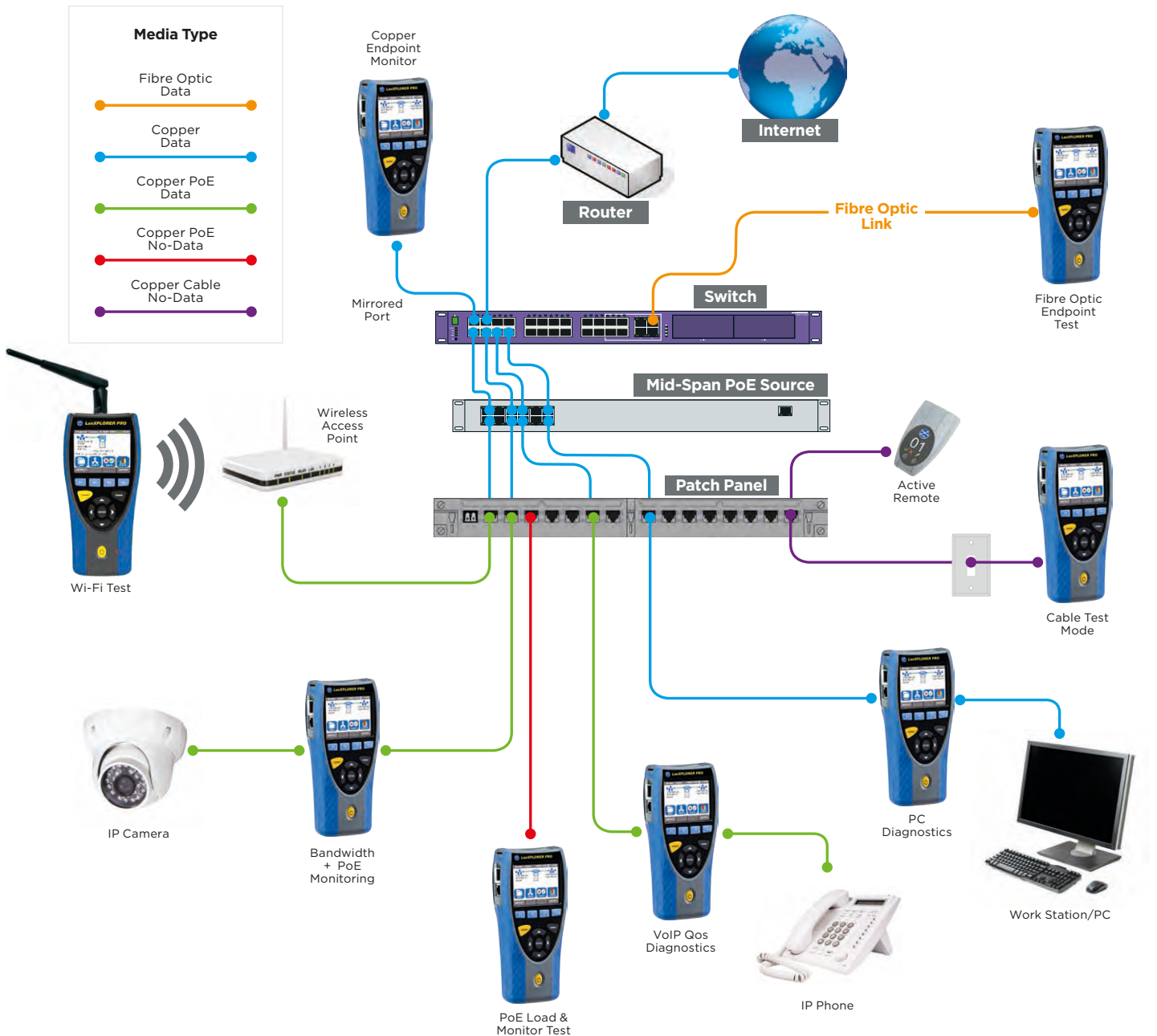
Network Troubleshooter with Bandwidth Monitoring and Performance Diagnostics

LanXPLORER Pro is a hand held tester for analysing and diagnosing problems in networks, cabling and Ethernet devices using copper, fibre and Wi-Fi interfaces.

Using the LanXPLORER Pro in-line and end point modes, IT Technicians can pinpoint issues that are unable to be found with management software as it physically connects to the point of interest instead of scanning the entire network.

LanXPLORER Pro does not examine the contents of the data being analysed therefore personal and confidential information will remain confidential.

Diagnostic reports can be saved in PDF format and shared with colleagues and clients using the free IDEAL AnyWare™ app and a mobile device.



## Voice over IP (VoIP) - Monitor Quality of Service (QoS) in real time using In-Line Mode.

Quality of Service (QoS) is measured in real time when LanXPLOER Pro is connected in-line between a VoIP phone using SIP (Session Initiation Protocol) and the network. QoS metrics include jitter, delay, total packets, packet loss, source/destination IP addresses and port number. With standard SIP, signalling processes are shown including call pick up, phone number of both phones and duration.

Call QOS 0002		Opt 1000	
Cur Jit (ms)	0.51	2.80	
Min Jit ms	0.06	1.27	
Max Jit ms	4.03	2.93	
Avg Jit ms	0.66	2.83	
Cur Dly (ms)	19.68	17.51	
Min Dly ms	0.27	17.24	
Max Dly ms	59.83	23.74	
Avg Dly ms	20.41	20.00	

Call Trace 0002		Opt 1000	
Call Num:1 Events			
6	SIP/2.0 180 Ringing		
7	SIP/2.0 200 OK		
8	ACK sip:10@10.0.0.21:5060 SIP/2.0		
9	BYE sip:10@10.0.0.21:5060 SIP/2.0		
10	SIP/2.0 200 OK		

## Wi-Fi Testing - Resolve issues on your Wi-Fi network and reduce downtime

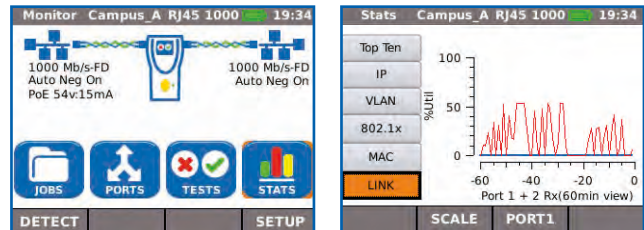
As well as using the Wi-Fi interface (2.4GHz 802.11 b/g/n) to connect and troubleshoot the network, the LanXPLOER Pro can perform a Wi-Fi site survey that displays the access point ID, signal strength, channel and encryption status. Quickly identify causes of slow Wi-Fi networks or connection issues, such as overlapping Wi-Fi channels or wrong SSID setup.

Identify top wireless bandwidth consumers and total aggregate bandwidth consumption (overloaded access point) when connecting the LanXPLOER Pro between wireless access point and the network.

Scan My JOB WiFi - 17:54			
Multiple Networks Using Same Channel			
	SSID	CH	WPA
5	BTWifi-X	11	WPA...
6	SEC_LinkShare_a9...	6	WPA2
7	SKY1CF25	11	WPA2
8	SKY40065	6	WPA

## Ethernet Device Diagnostics and Troubleshooting using In-line Mode (Copper)

The in-line feature allows monitoring of network traffic between any two devices on the network to diagnose Ethernet issues that cannot be detected by software tools running on a PC or managed switch.



## Top 10 Talkers and Listeners

Identifies top 10 bandwidth consuming devices (both transmitting and receiving) on the network to help troubleshooting, e.g. connect between core switch and the internet router to monitor total incoming and outgoing internet bandwidth consumption and identify top 10 bandwidth consuming devices.

Talkers My JOB RJ45 100 11:53	
Top Ten Talkers 30 secs	
Host IP	Avg Mb/s
192.168.1.25	9.1578
192.168.1.9	0.0218
40.115.1.44	0.0022
62.24.213.82	0.0003
213.199.179.164	0.0002
216.58.198.238	0.0002

Listeners My JOB RJ45 100 11:53	
Top Listeners 30 secs	
Host IP	Avg Mb/s
192.168.1.15	7.0718
64.233.167.189	0.0018
192.168.1.9	0.0014
65.55.223.37	0.0009
111.221.77.151	0.0008
216.58.213.78	0.0007

## Traffic Statistics

Monitor Min/Max/AVG throughput in Mb/s, packet count, frame size and Ethernet protocols.

MAC My JOB RJ45 100 11:54		
MAC	Rx (port1)	Rx (port2)
Max Frames/s	843	7
Cur Rate bps	1.00032e+07	44.648
Avg Rate bps	9.51202e+06	3,975
Max Rate bps	1.0041e+07	44.648
Cur Util %	10	1
Avg Util %	9	1
Max Util %	10	1

MAC Campus_A RJ45 1000 19:39		
MAC	Rx (port1)	Rx (port2)
Frames	17	5.06508e+06
Total Bytes	3,145	6.93994e+09
Unicast	0	5.06504e+06
Broadcast	0	3
Multicast	17	22

## VLAN Detection

Automatic detection of VLAN ID's.

VLAN PTG RJ45 1000 16:24	
Rx (port1)	Rx (port2)
70	70
80	80
60	60
50	50

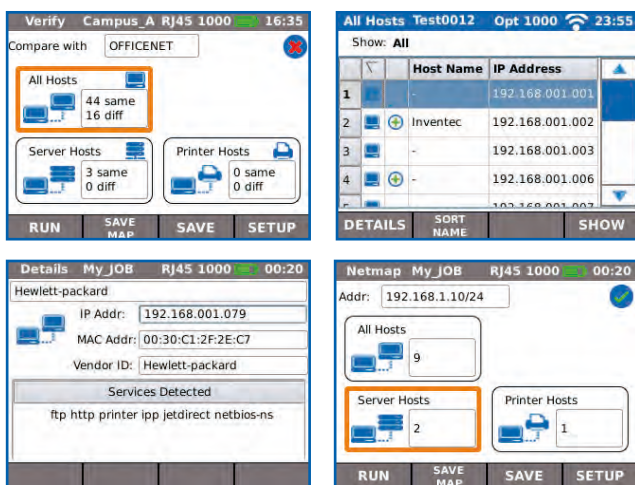


## Network Diagnostic and Troubleshooting using End-Point Mode (Copper, Fibre and Wi-Fi)

The end-point feature is used to monitor and examine the LAN when connected directly to a network port or a mirrored port.

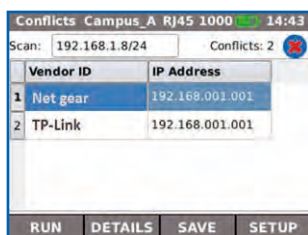
### NETMAP/NETVERIFY

This function performs a scan of your entire network to identify all active devices by IP address, MAC address and host name which can be saved and compared to future NETMAPS to identify new or removed network devices, or changes in network configuration.



### Network Conflicts

Identifies source of network conflicts such as unintentionally adding DHCP servers or devices using duplicate IP addresses.



## Network Discovery

Connect to active network ports or Ethernet devices to verify network status and connectivity.

- Displays port ID of LLDP/CDP/EDP enabled switches to eliminate manual cable tracing.
- Check Ethernet connectivity at device location to 10/100/1000 Mb/s
- Verify network configuration (device IP/gateway address/subnet mask)
- Identify IP address/name of router and number of hops between network points with traceroute test
- Troubleshoot devices by connecting directly to the Ethernet port to test operation, speed and duplex settings of the device
- Ping local network devices such as DNS, gateway/router, file servers, network printers, wireless access points, etc. Test internet connectivity by pinging website URL's, e.g. [www.google.com](http://www.google.com) to verify min, max and average response time.

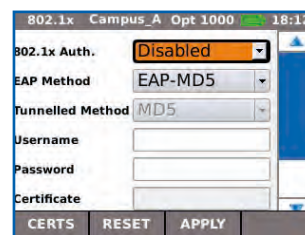


### Detection of potentially misconfigured devices

LanXPLOER Pro identifies devices that are generating network errors or degrading network performance, e.g. computers infected with malware creating broadcast storms that may disable or congest a network.

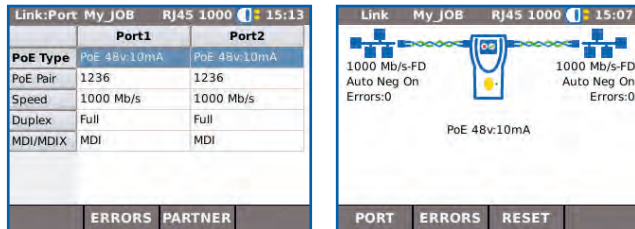
### IEEE 802.1x

Use the 802.1X protocol to log onto networks secured by this standard, avoiding unnecessary security complications and lengthy project delays. (802.1X is a standard for port-based Network Access Control (PNAC))



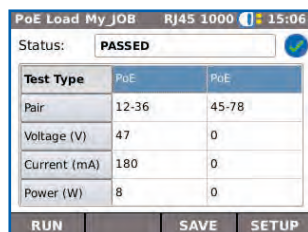
## Power over Ethernet (PoE) Testing PoE Monitoring

Using the in-line mode, LanXPLOER monitors the voltage and current used at the device.



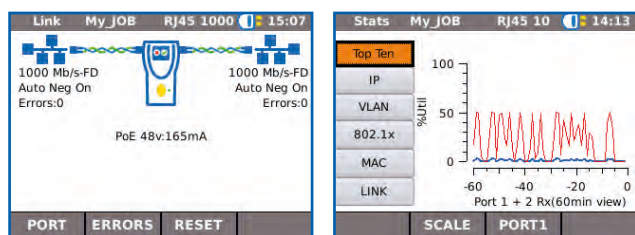
## PoE/PoE+ Load Test

Performs PoE/PoE+ load tests to determine the maximum power available to a PoE device at its installed location.



## IP Camera/CCTV Diagnostics and Troubleshooting using In-line Mode (Copper)

Connect between network and NVR (Network video recorder) to identify IP address, host name and bandwidth consumption of each camera. Connect between individual IP camera and the network to monitor bandwidth and power consumed using PoE.



## Cable Testing (Copper and Fibre)

The LanXPLOER Pro offers a series of tests to aid troubleshooting.

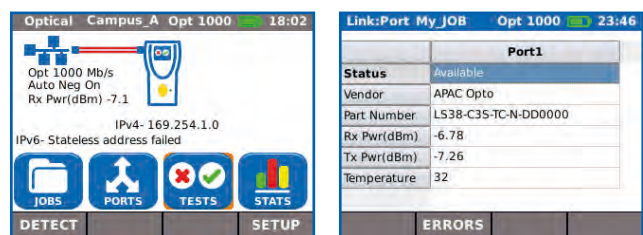
### Copper Cabling Tests

- Wiremap test for open, shorts, miswires and split pairs to TIA-568 standard
- Distance to fault using TDR technology (copper only)
- Ability to identify and trace cables with a compatible amplifier probe (62-164)
- Port blink to visually trace cable from work area outlet to network switch



### Fibre Cabling Tests

- Optical power indication (with compatible SFP modules)
- Port blink to visually trace cable from work area outlet to network switch
- Check the fibre SFP characteristics including the vendor name, model number and optical power level.



# LanXPLORER Pro

## Ports for copper, fibre and Wi-Fi

Save money by employing a single device to test entire networks

## User-exchangeable RJ45 Inserts

Field replaceable RJ45 contacts reduce downtime

## Virtual keyboard

Work efficiently, quickly and easily input data

## Autotest function

Predefine common tests under one Autotest button to improve productivity

## Share test data

Provides mobile device connectivity using USB Wi-Fi adapter and free IDEAL AnyWARE app



## In-Line test

Diagnose network issues using comprehensive In-Line test capability

## Colour touch screen

Reduce the chance of false readings with a clear, bright backlit screen

## Durable rubber moulded housing

Rubberised housing protects the tester from accidental damage and reduces cost of ownership

## A choice of power supply

Choose between mains power or rechargeable batteries to suite your environment



Send test reports from anywhere using the free app



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AnyWARE



### Step 1 Test

- Create job folder
- Enter job site information
- Perform autotest on copper/fibre cabling and copper/fibre/Wi-Fi networks



### Step 2 Connect

- Activate LanXPLORER Pro wireless hotspot
- Connect your mobile phone or tablet with the IDEAL AnyWARE App
- Transfer test reports to your mobile device
- View test reports



### Step 3 Send

- Select reports (PDF or CSV) to send
- Select preferred transfer method – email, ftp, cloud storage etc.
- Send file
- Alternatively save test reports to USB key



Download the FREE app today



## NavITEK NT Pro

- Display network configuration - IPv4 / IPv6 compatible
- Wiremap for miswires, split pairs, opens and shorts
- Distance to opens and shorts (TDR)
- PoE/PoE+ detection and load test
- Tone generator for cable tracing
- Autotest button performs Ping and Traceroute test (network mode)
- Hub blink for port identification
- DHCP client
- Switch speed detection - 10/100/1000 Mb/s
- User-exchangeable RJ45 inserts
- Support for up to 12 wiremap remotes
- Backlit colour screen
- Autotest button performs a suite of network tests: Internet connectivity (Ping, DNS, Gateway, Traceroute) and NetScan

- Network Probe (NET TEST) provides detailed network information of each device
- Port identification using EDP/CDP/LLDP protocols
- VLAN detection
- Traffic utilisation bar graph
- Generate test reports (PDF or CSV)
- Send test reports from your mobile device using the free IDEAL AnyWARE App
- Logon using the 802.1x protocol
- Optical interface with power level and pass/fail indication with supported SFP
- Loopback mode for transmission testing on both copper and fibre interfaces

## LanXPLORER Pro

All features of the NavITEK NT Pro as well as the following:

- Monitor PoE power consumption in-line
- NETMAP list all networks devices
- NETVERIFY compare two NETMAP scans to identify changes on the network
- In-line mode for Ethernet device troubleshooting (copper)
- VoIP QoS and signal testing (in-line)
- Wi-Fi interface to access network
- Wi-Fi site survey @2.4GHz 802.11b/g/n
- Top 10 bandwidth talkers and listeners
- Discover IP address conflicts
- Traffic statistics - network and devices
- Touch screen



# LanXPLOER Pro

Network Troubleshooter with Bandwidth Monitoring and Performance Diagnostics

## Proof of Performance



## Ordering Information

Part No.	Kit Contents
R150001	<b>LanXPLOER Pro</b> – In-line Network Troubleshooter 1 x LanXPLOER Pro test unit, 1 x remote unit #1, 1 x high sensitivity Wi-Fi antenna, 1 x IDEAL amplifier probe 62-164, 1 x RJ45 insert extraction tool plus 10 x RJ45 inserts, 1 x power module (rechargeable), 1 x mains PSU/charger, 2 x 30cm RJ45 cable, 1 x USB Wi-Fi adapter, 1 x carrying case

## Optional Accessories

Part No.	Description
MGKSX1	1 x 850mm SX MM SFP + fibre patch cord accessories kit
MGK LX2	1 x 1310mm LX SM SFP + fibre patch cord accessories kit
MGKZX3	1 x 1550mm ZX SM SFP + fibre patch cord accessories kit
150058	1 x RJ45 insert extraction tool, 10 x lifejack RJ45 inserts
62-164	1 x IDEAL amplifier probe
150050	1 Set of eleven active remotes #2 to #12 incl 12 cables
150053	1 x Rechargeable NiMH Battery Pack

For replacement accessories, please visit our website.

## Basic Specifications

Max. No. of Jobs	Max. No. of Stored Test	Max. Length	Battery Life	Dimensions per handset in mm	Weight of handset
30	7500	150m	5 hours	205 (L) x 98 (W) x 45 (D)	0.475kg

For detailed specifications, please visit our website.

**LanXPLOER Test Report**

Job Name: MyJob  
Date Tested: February 9 2016  
Time Tested: 11:03  
Info 1: 10.1  
Info 2: 10.2  
Info 3: 10.3  
Info 4: 10.4  
Info 5: 10.5  
Info 6: 10.6  
Info 7: 10.7  
Info 8: 10.8

Owner: testnet  
Company: lg  
Address 1: cv  
Address 2: 10  
City: lk  
State: all  
Zip: 15127  
Country: G  
Phone #1: 12356  
Phone #2: 67890

Test Result: **FAIL**  
test001 0  
ESN: 001006E8B0002

Detected VLAN IDs: PoE84V

Port	Line Rate	Queue	IPV4	IPV6
Auto	Auto	Auto	Disabled	Disabled
1000 Mb/s	Full Duplex	Assigned 172.20.254.2		

Port	Type	Min. Par	Max. Par	Setup	Results
172.20.254.2	Class C/24	Enabled	Found		

PCF	Load	Full	Min	Max	Par	Par	Par	Par	Par	Par	Par	Par	Par
0	0	0	0	0	0	0	0	0	0	0	0	0	0

IPV4	Destination	From	Length	Offset	ICMP	IC	Min RTT	Max RTT	Max RTT
0	www.google.com	1000	0	0	0	0	0	0	0
0	www.bbc.com	1000	0	0	0	0	0	0	0
0	www.yahoo.com	1000	0	0	0	0	0	0	0
0	www.youtube.com	1000	0	0	0	0	0	0	0

NETMAP	Item	Address	Subnet	IPV6	Hosts	Found
0	172.20.254.2	Class C/24	Enabled	Found		

Net Verify	Item	IP Address	Hosts	Found	Unchanged	Created	New	Missing
0	172.20.254.2	Class C/24	Enabled	Found				

CONFLICTS	Item	Address	Subnet	Conflicts	Found
0	172.20.254.2	Class C/24	Enabled	Found	

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