



Network Troubleshooter with Bandwidth Monitoring and Performance Diagnostics

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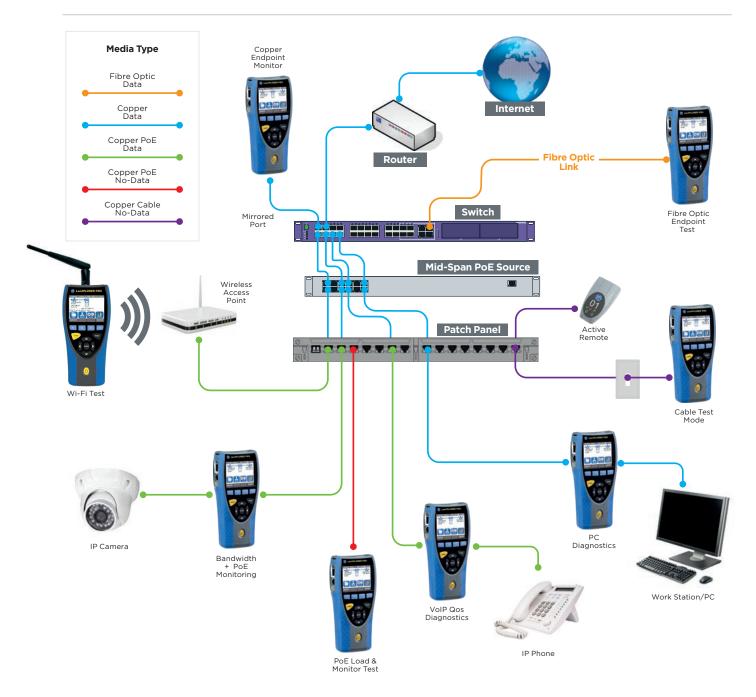


Network Troubleshooter with Bandwidth Monitoring and Performance Diagnostics LanXPLORER Pro is a hand held tester for analysing and diagnosing problems in networks, cabling and Ethernet devices using copper, fibre and Wi-Fi interfaces.

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 TREND AnyWare<sup>™</sup> 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 LanXPLORER 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.



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

As well as using the Wi-Fi interface (2.4/5GHz 802.11a/b/g/n/ac) to connect and troubleshoot the network, the LanXPLORER Pro can perform a Wi-Fi site survey that displays the access point ID, signal strength (dBm), Signal to Noise Ratio (SNR), 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 LanXPLORER Pro between wireless access point and the network.

Scan MyJob Multiple Networks Usi		can MyJob WiFi 72 🚺 🖥 1 Itiple Networks Using Same Channel		.2:21
	2.4/5GHz:31	dBm $ abla$	SNR dB	
1	IEU_Guest			
2	IEU_Wireless	<u>-1</u> -56	36	
3	linksys5G	<u>-fi</u> ] -60	32	
4	Aero-UTC	<u>-1</u> -64	30	
	UTCOLOURE	-	20	
2	4GHz CHANN	EL SC	AN LE	AVE

#### 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	Listeners My_JOB	RJ45 100 <u>(</u> ]=	11:53
Top Ten Talkers	30 secs		Top Listeners	30 secs	
Host IP	Avg Mb/s	4	Host IP	Avg Mb/s	
192.168.1.26	9.1578		192.168.1.15	7.0718	
192.168.1.9	0.0218		64.233.167.189	0.0018	
40.115.1.44	0.0022		192.168.1.9	0.0014	
62.24.213.82	0.0003		65.55.223.37	0.0009	
213.199.179.164	0.0002		111.221.77.151	0.0008	
216.58.198.238	0.0002	-	216.58.213.78	0.0007	-
	0.0000		C1 1 00 170	0.0007	
PROTO PEAK	RESET S	ETUP	PROTO PEAR	K RESET SI	TUP

#### **Traffic Statistics**

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

	Rx (port1)	Rx (port2)		Rx (port1)	Rx (port2)
Max Frames/s		7	Frames		
Cur Rate bps	1.00032e+07	44,648	Total Bytes	3,145	6.93994e+09
Avg Rate bps	9.51202e+06	3,975	Unicast	0	5.06504e+06
Max Rate bps	1.0041e+07	44,648	Broadcast	0	3
Cur Util %	10	1	Multicast	17	22
Avg Util %	9	1			
Max Util %	10	1			

#### **VLAN Detection**

Automatic detection of VLAN ID's.

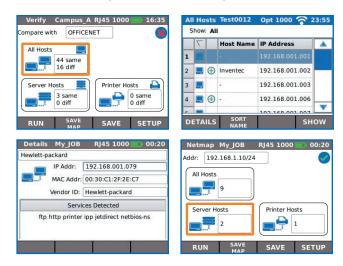
• • 3

#### 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.

Vendor ID IP Address	
	-
1 Net gear 192.168.001.0	01
2 TP-Link 192.168.001.0	01

#### **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 to verify min, max and average response time.



## Detection of potentially misconfigured devices

LanXPLORER 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))

802.1x Auth.	Disabled	Ţ	4
EAP Method	EAP-MD5	-	
Tunnelled Method	MD5	-	
Username			
Password			
Certificate			



#### **Power over Ethernet (PoE) Testing** PoE Monitoring

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



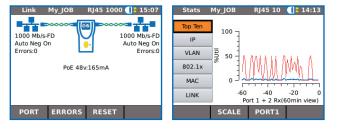
#### PoE/PoE+ Load Test

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

Status:	PASSED	
Test Type	PoE	PoE
Pair	12-36	45-78
Voltage (V)	47	0
Current (mA)	180	0
Power (W)	8	0

#### 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 LanXPLORER 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 (R180001)
- 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.

Optical Campus_A Opt 1000 📰 18:02	Link:Port №	1y_JOB Opt 1000 💼 23:46
		Port1
Opt 1000 Mb/s	Status	Available
Auto Neg On Rx Pwr(dBm) -7.1	Vendor	APAC Opto
IPv4-169.254.1.0	Part Number	LS38-C3S-TC-N-DD0000
IPv4- 169.254.1.0 IPv6- Stateless address failed	Rx Pwr(dBm)	-6.78
	Tx Pwr(dBm)	-7.26
	Temperature	32
JOBS PORTS TESTS STATS		
DETECT SETUP		ERRORS

#### **Custom Wiremap**

LanXPLORER Pro provides an extended list of wiremap templates for common Ethernet cable types including CAT 6A/7A/8, and non-Ethernet cable, such as Profinet, ISDN and Deutsche Bahn (German Rail system).

Custom MyJob		RJ45 - 🚺	1	7:50
Cable Type				
Custom	•		1	
Shield Type	_		2	
UTP/STP	•		3	
Display Pref			4	
568B	•		6	Н
Cable Name	_	~~~~~	7	ī
Cable1			8 S	
MORE APPL	r			

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#### Send test reports from anywhere using the free app



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#### 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 TREND AnyWARE App
- Transfer test reports to your mobile device
- View test reports

#### Download the FREE app today



- GET IT ON Google play
- Select reports (PDF or CSV) to send
  Select preferred transfer method email, ftp, cloud storage etc.

Send

Step 3

- Send file
- Alternatively save test reports to USB key

## 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 TREND 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
- Custom wiremap

## 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 identity 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 @2.4/5GHz 802.11a/b/g/n/ac
- Top 10 bandwidth talkers and listeners
- Discover IP address conflicts
- Traffic statistics network and devices

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• Touch screen

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#### Ordering Information

Part No.	Kit Contents
R150001	<b>LanXPLORER Pro</b> – In-line Network Troubleshooter 1 x LanXPLORER Pro test unit, 1 x remote unit #1, 1 x 2.4/5GHz Wi-Fi antenna, 1 x TREND amplifier probe R180001, 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
MGKLX2	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
R180001	1 x TREND 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		Max.	Battery	Dimensions per	Weight of
of Jobs		Length	Life	handset in mm	handset
30	7500	150m	5 hours	205 (L) x 98 (W) x 45 (D)	0.475kg

For detailed specifications, please visit our website.

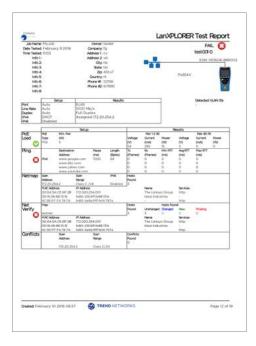


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