



**TREND NETWORKS**



**Now includes  
2.4/5GHz  
Wi-Fi antenna**

# **LanXPLORER Pro**

Network Troubleshooter with Bandwidth Monitoring  
and Performance Diagnostics

# LanXPLORER Pro



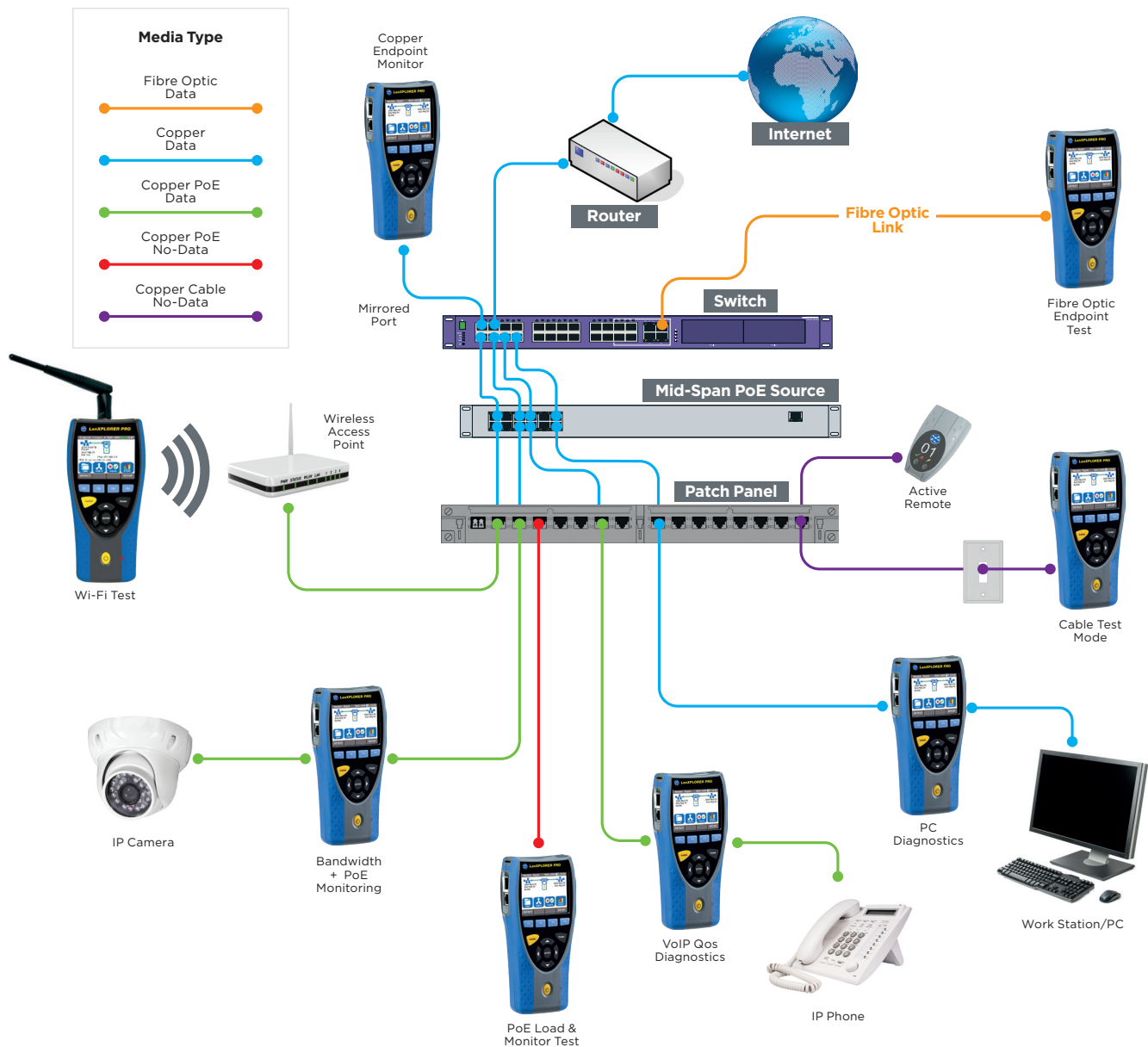
Network Troubleshooter with  
Bandwidth Monitoring and  
Performance Diagnostics

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 TREND 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 17:54 |       | Call Trace 0002 Opt 1000 17:53 |  |
|------------------------------|-------|--------------------------------|--|
| 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 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                    |

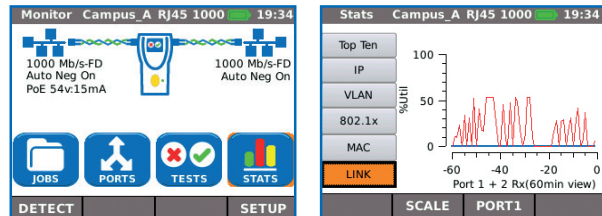
## Wi-Fi Testing – Resolve issues on your Wi-Fi network and reduce downtime

As well as using the Wi-Fi interface (2.4/5GHz 802.11a/b/g/n/ac) to connect and troubleshoot the network, the LanXPLOER 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 LanXPLOER Pro between wireless access point and the network.

| Scan MyJob WiFi 72 12:21             |              |     |        |
|--------------------------------------|--------------|-----|--------|
| Multiple Networks Using Same Channel |              |     |        |
|                                      | 2.4/5GHz:31  | dBm | SNR dB |
| 1                                    | IEU_Guest    | -56 | 36     |
| 2                                    | IEU_Wireless | -56 | 36     |
| 3                                    | linksys5G    | -60 | 32     |
| 4                                    | Aero-UTC     | -64 | 30     |
| 2.4GHz CHANNEL SCAN LEAVE            |              |     |        |

## 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 11:53 |          |
|-------------------------------|----------|---------------------------------|----------|
| Top Ten Talkers 30 secs       |          | Top Listeners 30 secs           |          |
| Host IP                       | Avg Mb/s | 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   |

## 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 Campus_A RJ45 1000 19:39 |             |
|---------------------------|-------------|------------------------------|-------------|
|                           | Rx (port1)  | Rx (port2)                   |             |
| Max Frames/s              | 843         | 7                            | Frames      |
| Cur Rate bps              | 1.00032e+07 | 44,648                       | Total Bytes |
| Avg Rate bps              | 9.51202e+06 | 3,975                        | Unicast     |
| Max Rate bps              | 1.0041e+07  | 44,648                       | Broadcast   |
| Cur Util %                | 10          | 1                            | Multicast   |
| Avg Util %                | 9           | 1                            |             |
| Max Util %                | 10          | 1                            |             |

## VLAN Detection

Automatic detection of VLAN ID's.

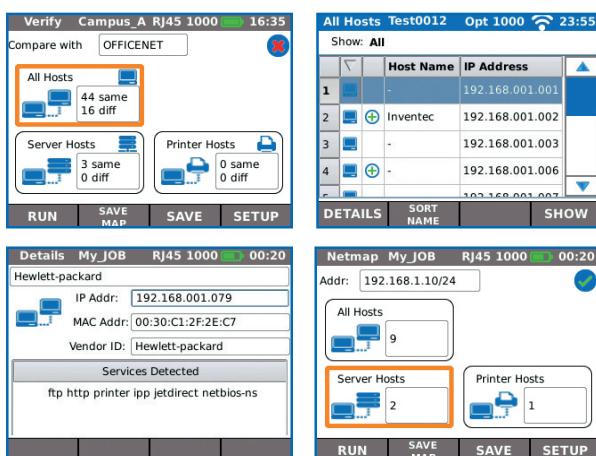
| VLAN PTG RJ45 1000 16:24 |            |
|--------------------------|------------|
| Rx (port1)               | Rx (port2) |
| 70                       | 70         |
| 80                       | 80         |
| 60                       | 60         |
| 50                       | 50         |

## 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.

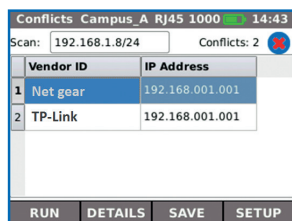
### NETMAP/NETVERIFY

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

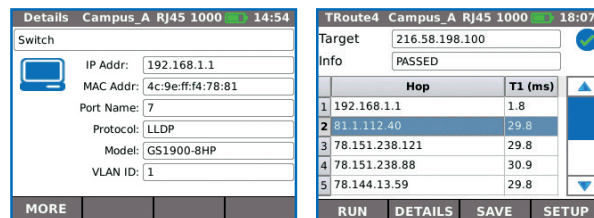
Identifies source of network conflicts such as unintentionally adding DHCP servers or devices using duplicate IP addresses.



## 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.

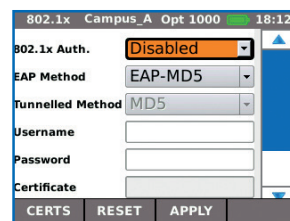


## Detection of potentially misconfigured devices

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

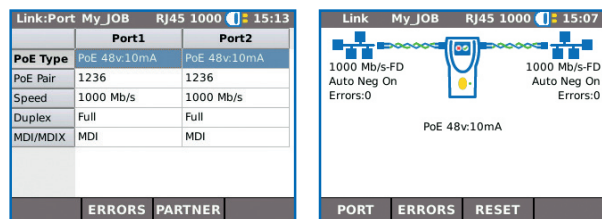
Use the 802.1X protocol to log onto networks secured by this standard, avoiding unnecessary security complications and lengthy project delays. (802.1X is a standard for port-based Network Access Control (PNAC))





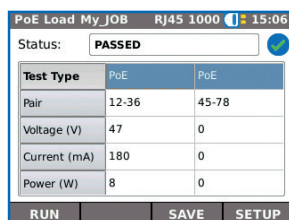
## Power over Ethernet (PoE) Testing PoE Monitoring

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



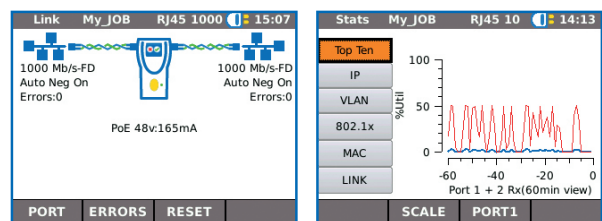
## PoE/PoE+ Load Test

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.

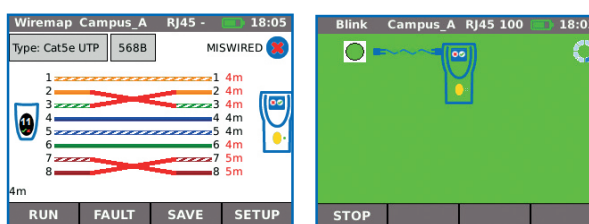


## Cable Testing (Copper and Fibre)

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

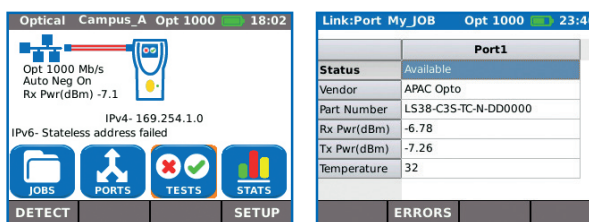
### Copper Cabling Tests

- 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



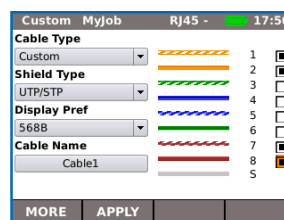
### Fibre Cabling Tests

- 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.



## Custom Wiremap

LanXPLOER 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).



# LanXPLOER 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 TREND AnyWARE app



**TREND**  
**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



**TREND**  
**AnyWARE**  
APP



## Step 1

### Test

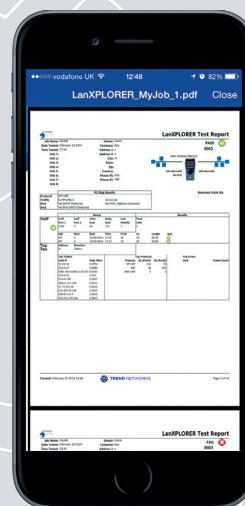
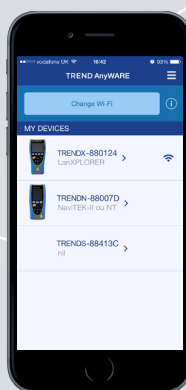
- Create job folder
- Enter job site information
- Perform autotest on copper/fibre cabling and copper/fibre/Wi-Fi networks



## 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



## 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 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 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 @2.4/5GHz 802.11a/b/g/n/ac
- 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

Depend On Us



## Ordering Information

| Part No.       | Kit Contents                                                                                                                                                                                                                                                                                                                                          |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>R150001</b> | <b>LanXPLOER Pro - In-line Network Troubleshooter</b><br>1 x LanXPLOER Pro test unit, 1 x remote unit #1, 1 x 2.4/5GHz Wi-Fi antenna, 1 x TREND 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                                                 |
|---------------|-------------------------------------------------------------|
| <b>MGKSX1</b> | 1 x 850mm SX MM SFP + fibre patch cord accessories kit      |
| <b>MGKLX2</b> | 1 x 1310mm LX SM SFP + fibre patch cord accessories kit     |
| <b>MGKZX3</b> | 1 x 1550mm ZX SM SFP + fibre patch cord accessories kit     |
| <b>150058</b> | 1 x RJ45 insert extraction tool, 10 x lifejack RJ45 inserts |
| <b>62-164</b> | 1 x TREND amplifier probe                                   |
| <b>150050</b> | 1 Set of eleven active remotes #2 to #12 incl 12 cables     |
| <b>150053</b> | 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.

Job Name: R150001  
Date Tested: February 9 2016  
Time Tested: 10:03  
Info 1:  
Info 2:  
Info 3:  
Info 4:  
Info 5:  
Info 6:  
Info 7:  
Info 8:

Owner: test01  
Company: test01  
Address 1: vti  
Address 2: vti  
State: IL  
City: 45707  
Country: US  
Phone #: 123456  
Phone #: 123456

## LanXPLOER Test Report

PAL  
test01  
EIN: 0006066-00000

PdE4V

Detected VLANs

| Port      | Setup    | Results               |
|-----------|----------|-----------------------|
| Line Rate | Auto     | 10000 Mbps            |
| Duplex    | Auto     | Full Duplex           |
| IPV4      | Enabled  | Assigned 172.20.254.2 |
| IPV6      | Disabled |                       |

| PCE Load | Min               | Max             | Per     | Min   | Max   | Per     | Min   | Max   | Per   |
|----------|-------------------|-----------------|---------|-------|-------|---------|-------|-------|-------|
| Load     | 0.00              | 0.00            | 0.00    | 0.00  | 0.00  | 0.00    | 0.00  | 0.00  | 0.00  |
| Ping     | Destination       | Hosts           | Length  | Min   | Max   | Avg     | Min   | Max   | Avg   |
| Ping     | www.google.com    | 1000            | 64      | 0     | 0     | 0       | 0     | 0     | 0     |
| Ping     | www.yahoo.com     | 1000            | 64      | 0     | 0     | 0       | 0     | 0     | 0     |
| Ping     | www.mcafee.com    | 1000            | 64      | 0     | 0     | 0       | 0     | 0     | 0     |
| Netmap   | Scan              | Range           | IPV4    | Hosts | Found | IPV6    | Hosts | Found | IPV6  |
| Netmap   | 172.20.254.2      | Class C/24      | Enabled | 1     | 1     | Enabled | 1     | 1     | 1     |
| Netmap   | MAC Address       | IP Address      | Hosts   | Found | IPV6  | Hosts   | Found | IPV6  | Hosts |
| Netmap   | 00:04:5A:CE:4F:2B | 172.20.254.0/24 | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.1    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.2    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.3    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.4    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.5    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.6    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.7    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.8    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.9    | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.10   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.11   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.12   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.13   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.14   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.15   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.16   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.17   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.18   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.19   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.20   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.21   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.22   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.23   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.24   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.25   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.26   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.27   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.28   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.29   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.30   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.31   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.32   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.33   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.34   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.35   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.36   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.37   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.38   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.39   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.40   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.41   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.42   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.43   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.44   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.45   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.46   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.47   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.48   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.49   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.50   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.51   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.52   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.53   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.54   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.55   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.56   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.57   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.58   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.59   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.60   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.61   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.62   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.63   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.64   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.65   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.66   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.67   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.68   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.69   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.70   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.71   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.72   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.73   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.74   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.75   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.76   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.77   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.78   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.79   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.80   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.81   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.82   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.83   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.84   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.85   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.86   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.87   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.88   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.89   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.90   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.91   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.92   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.93   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.94   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.95   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.96   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.97   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.98   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.99   | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.100  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.101  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.102  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.103  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.104  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.105  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.106  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.107  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.108  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.109  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.110  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.111  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.112  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.113  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.114  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.115  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.116  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.117  | 1       | 1     | 1     | 1       | 1     | 1     | 1     |
| Netmap   | 00:0C:8B:00:10:1E | 172.20.254.118  |         |       |       |         |       |       |       |