IDEAL INDUSTRIES NETWORKS

LanXPLORER PRO- In-Line Network Tester - Data Sheet

Connectors

Primary RJ45 test port on left side	Used for: Cable Test, Endpoint Test, In-Line Test	Samtec Lifejack with user-replaceable contacts	500 insertion cycles
Secondary RJ45 test port on right side	Used for: In-Line Test	Samtec Lifejack with user-replaceable contacts	500 insertion cycles
Optical test port on left side	Used for: Endpoint test	SFP Socket	-

USB port for result upload & software update at top	Class: Host	Connector Type A	1.1 USB Type	
Power port for battery charging, mains powering via adaptor on right side	12V Voltage	Connector Type 2.0 pin power jack	2 Amp Current	Centre Pin positive polarity

Controls

Screen:	Touch Screen	Used for: Touch Control of all Tester Functions	Located on front
On/Off:	Push Button	Used for: Power On/Off	Located on front
Function Keys:	F1 to F4	Used for: Screen Defined Functions	Located on front
Navigation Keys:	Cursor, Enter & Escape	Used for: User Interface Navigation	Located on front
	AutoTest	Used for: Launch of automatic test sequence	Located on front
Reset:	Push Button	Used to Escape from exceptional lockup condition	Accessible through hole inside battery compartment using stylus tip

Displays

Charger LED	Indication of charging status…	Red/Green	Located on front
Primary RJ45 Link LED	ON indicates Primary link UP	Green	Adjacent to socket
Primary RJ45 Activity LED	Flashing indicates Primary link activity	Green	Adjacent to socket
Secondary RJ45 Link LED	ON indicates Secondary link UP	Green	Adjacent to Secondary RJ45 socket
Secondary RJ45 Activity LED	Flashing indicates Secondary link activity	Green	Adjacent to Secondary RJ45 socket
Optical Link LED	ON indicates Optical link UP	Green	Adjacent to SFP socket
Optical Activity LED	Flashing indicates Optical link activity	Green	Adjacent to SFP socket

Screen	LCD
Type	QVGA Colour
Pixels	320 x 240
Use	Display of setup functions and results
Size	3.5 inch diagonal
Location	Front

Ports - RJ45

Mode	Full Duplex, Half Duplex	Link Pulse Polarity	Normal, Inverted	Auto Negotiation	Disabled or Enabled
Min. RX size / MAC	19-99 / Factory set	Link Pulse Height	Normal, Low	Speed	10Mbps, 100Mbps & 1Gbps

Cable Mode Tests	Wiremap, Tone Generator, Auto (Wiremap)
Endpoint Mode Tests	Netmap, Ping, PoE, Net Verify, Trace Route, Loopback, Top Ten, Hub Blink, Auto (PoE Load, Ping, Trace Route, Network Verify)
In-Line (Monitor) Mode Test	PC Diagnostics, VoIP, Top Ten
Service Detection	PoE, ISDN s (with audible warning), PBX (with audible warning), Unknown (with audible warning)

VLAN	Enabled, Disabled
VLAN ID	0 to 4094
VLAN Priority	0-7
Auto Detect Mode	Cable, Endpoint, In-Line (Monitor)

Ports - Optical

The following SFP types are supported. Use of other types of SFP is possible but correct operation is not guaranteed

SFP Type SX	Manufacturer Part # Avago AFBR-5705Z / Apac LM28-C3S-TI-N-DD	1Gbps	Multimode	850nm	LC Duplex
SFP Type LX	Manufacturer Part # Avago AFCT-5705Z	1Gbps	Singlemode	1310nm	LC Duplex
SFP Type ZX	Manufacturer Part # Apac LS48-C3U-TC-N-DD	1Gbps	Singlemode	1550nm	LC Duplex

Optical Tests	Tx Power µW (using a specified SFP), Rx Power µW (using a specified SFP)
Network Tests	Netmap, Ping, Net Verify, Trace Route, Loopback, Top Ten, Hub Blink, Auto (Ping, Trace Route, Network Verify)

Ports - WiFi

SSID	Text entry by full virtual keyboard Entry from WiFi scan
Encryption	None, WEP, WPA-PSK
Key/Key Type	Text entry by full virtual keyboard / ASCII, HEX

Sensitivity	Designed for convenient network testing via local access points. Internal antenna not intended for comparative measurements of distant access points. Included high sensitivity external USB antenna for enhanced detection of lower signal strength access points
Frequency/Mode	2.5GHz / 802.11bgn

Scan	Signal strength indication, SSID, BSSID, Channel, Mode (802.11b/g/n), Encryption (None / WEP / WPA / WPA2)
Network Tests	Netmap, Ping, Net Verify, Trace Route, Auto

In-Line Tests

PC Diagnostics Results	Protocols: Protocol, Frames. Traffic: Host IPv4 address, Peak Mb/s. IP data: Info, IPv4 address, Gateway, Subnet mask, Primary DNS, Secondary DNS, DHCP Server. Link: Errors, Info
VOIP Test	Protocols: Session Initiation Protocol (SIP), H323
VOIP Test Setup	VoIP Port 1:1 to 65535. VoIP Port 2: 1 to 65535. Max Jitter Test Threshold (ms): 1 to 999999, Max DelayTest Threshold (ms): 1 to 999999. Max Lost Packets Test Threshold (%):1 to 100
VOIP Test Results	Call Log: Last 20 calls, Call start time, Destination number, Call length (mm:ss). Jitter: Last successfully connected call (ms to 3 decimal places), according to RFC3550. Delay: Last successfully connected call (ms)

LanXPLORER PRO - In-Line Network Tester - Data Sheet

Cable Tests

Wiremap Setup	*Cable Type:* Cat3 UTP, Cat3 STP, Cat5 UTP, Cat5 STP, Cat5e UTP, Cat5e STP, Cat6 UTP, Cat6 STP, Cat7, USOC, ETH S12-36, ETH S12-78, ETH U1236, ETH U1278, IND. M12, COAX RJ59. *Colour Scheme:* None, 568A, 568B, USOC, TERA. *Cross Over Allowed:* Yes, No. *NVP:* Fixed 72%, Custom 59% - 89%
Wiremap Termination Type	None – Open, Passive Remote - #1 - #8, Active Remote - #1 - #12
Wiremap Tests (No Termination)	Faults: Open circuit by pin, Short circuit by pin. Length of pair: Metres / Feet (Set in System Setup), Range 100m / 390ft
Wiremap Tests (Passive Remote Termination)	I/D – Remote #: Faults: Open circuit by pair, Short circuit by pin, Crossed pairs. Length of pair: Metres / Feet (Set in System Setup), Range 100m / 390ft
Wiremap Tests (Active Remote Termination)	I/D–Remote #: Indications on Remote: Voltage Warning (>±10volts on any pins), Pass/Fail. Faults: Open circuit by pin, Short circuit by pin, Crossed pairs, Split pairs, Bridged shorts, Remote shorts. Length of pair: Metres/Feet (Set in System Setup), Range 100m/ 390ft
Tone Generator Setup	Tones: 3. Wire I/D: Tone applied to one of 8 pins relative to the other 7, Tone applied across one of 4 pairs
Tone Generator Test	Audible tone detected using compatible tone probe

Endpoint Tests

VLAN	VLAN: Enabled, Disabled. ID: 0 to 4094. Priority: 0 to 7
IP	Addressing: DHCP, Static. Version: IPv4. Netmask. Gateway. DNS1:Numerical address only. DNS2: Numerical address only
Netmap Setup	Network: Local, Custom. Address: IPv4 format. Scan Range: Normal (000.255), Wide (015.255)
Netmap Results	Hosts count : All Hosts, Server Hosts (differentiation based on services / ports), Printer Hosts (differentiation based on services / ports). Host details: Host Name, IPv4 Address, MAC Address, Services Detected
Ping Setup	Target: IPV4 address, URL. Count: 1 to 999999. Pause: 0 to 5000 ms. Length: 8 to 3000 bytes
Ping Results	Info: READY, IN PROGRESS, PASSED, NO RESPONSE, UNKNOWN HOST. Tx Count: 0 to 999999. Rx Count: 0 to 999999. Delay(ms): Minimum, Average, Maximum
PoE Setup	Test Type: PoE, PoE Plus. Min PoE Power Test Threshold: 1 to 15 watts. Min PoE Plus Power Test Threshold: 1 to 28 watts
PoE Results	Status: READY, FAILED NO POE DETECTED, PASSED. Pair: 12/36, 45/78. Voltage: 0 to 60 volts. Current: 0 to 600 mA. Power: 0 to 36 watts
Net Verify Setup	Comparison Map: Stored map from previous Netmap test
Net Verify Results	Hosts count : All Hosts Same / Different, Server Hosts Same / Different, Printer Hosts Same / Different. Host details: Host Name, IPv4 Address, MAC Address, Services Detected
Trace Route Setup	Target: IPV4 address, URL. Max Hops: 1 to 100. Timeout: 1 to 30 sec. Type: ICMP, UDP
Trace Route Results	Info: READY, IN PROGRESS, PASSED, NO RESPONSE, UNKNOWN HOST. Hop: IPv4 address. Delay(ms): t1, t2, t3
Loop Back Setup *	Type: Wireline, MAC, IP, UDP
Top Ten Setup	Period: 1 sec, 30 sec, Peak
Top Ten Results	Top Ten: Talkers, Errors, Protocols. Host: IPv4 address. Bandwidth: Average Mb/s
Blink Test	Sequence: Off/10/Off/100/Off/1000 Mb/s

Statiscics

Top Ten Setup	Period: 1 sec, 30 sec, Peak
Top Ten Results	Top Ten: Talkers (average Mb/s), Errors (Frame Count), Protocols (Frame Count). Host: IPv4 address. Bandwidth: Average Mb/s
IP Results	Info, Listening, IPv4 address, Gateway, Subnet mask, Primary DNS, Secondary DNS, DHCP Server
VLAN Results	Rx & Tx: VLAN (Endpoint), Rx & Tx: VLAN (In-Line)
MAC Results	Rx & Tx: Frames, Total Bytes, Unicast, Broadcast, Multicast, Max Frames/sec, Current Rate bps, Average Rate bps, Max Rate bps, Current Utilisation %, Average Utilisation %, Max Utilisation %, Size
MAC Discovery	LLDP,CDP, EDP
Link Results	PORT: PoE Type, PoE Pair, Speed, Duplex, MDI / MDIX, Signal Level, Polarity. PARTNER: 10M-HD. 10M-FD, 100M-HD, 100M-FD, 1000M-HD, 1000M-FD. ERRORS: Collisions, FCS Errors, Undersize, Oversize, Jabbers, Bad Length

Storage

Internal storage configurations	Number of configurations – 2 (Current + Factory settings). Export to USB. Format: .xml
Internal storage results	Max Number of Jobs (Projects) – 30, Max Number of result sets per Job – 250, Max total number of result sets - 7500. Export to USB. Format: .xml. PC Viewer: Any IE-comptible browser

General

Internal Clock	Used for: Timestamping results. Autonomy: Up to 2 days with battery removed
Power: Battery	Supported Types: Internally rechargeable 6 x AA NiMH cell pack, 6 x AA Alkaline cells. Autonomy: 5 hours minimum (Rechargeable pack only), Recharge time: 3 hours (Rechargeable pack only)

Dimensions	Length: 205mm, Width: 98 mm, Depth: 45mm
Weight	Unit: 470g, Batteries: 180g
Temperature	Operating: 0°C to 40°C, Storage: -20°C to 70°C
Relative Humidity	Min: 5%, Max: 90% non-condensing
EMC Approvals	EN 55022:2006 / A1:2007, EN55024:1998 / A1:2001 / A2:2003
Safety Approvals	IEC 60950-1:2005+A1:2009/EN 60950-1:2006+A1:2010

System Setup

Language Preferences	English, German, French, Spanish, Italian
Auto Off Preferences	Disabled, 3 mins, 10 mins, 30 mins
Backlight Preferences	Always on, Switch off after 3 mins
Length / Units Preferences	Metres, Feet
Software Upgrade	Via USB

IDEAL INDUSTRIES NETWORKS DIVISION
Unit 3, Europa Court, Europa Boulevard, Westbrook, Warrington, Cheshire, WA5 7TN, U. K.
Tel.: +44 (0)1925 444446, Fax:+44 (0)1925 445501
uksales@idealnwd.com
www.lanxplorer.co.uk

Publication No.: 150814 Rev. 2
©01/11 IDEAL INDUSTRIES NETWORKS DIVISION
Printed in UK

Technical specifications are subject to change without notice.