



# **DTX Series Network Service Module**

Certify cabling and verify network availability using one handheld tool.



As users demand increasingly reliable network services, the requirements for network testing become ever more strenuous. Whether you're activating a new service, installing Power over Ethernet or performing moves, adds and changes, best practice demands verifying service availability after certifying the cabling link. If you both and document all test results in a consolidated report you will assure end-users that the network infrastructure was delivered in good working order. The DTX Network Service Module in conjunction with the DTX Series CableAnalyzer™ is the fastest way to do just that.

# Increase the value of your services

The industry's leading tool for certifying twisted-pair cabling and fiber can also verify the delivery of network services over copper. The Network Service Module is an add-on to the DTX Cable Analyzer that quickly tells a technician if IP-level services and/or Power over Ethernet are available. By coupling service testing with cable certification, the DTX delivers important information that proves an installation conforms to standards and best practices. In addition, LinkWare Cable Management software documents test results and displays them in professional, easy-to-read reports.

# The best practice approach

What is the best practice for testing a cable installation?

The three key elements are:

- Certifying that the cabling infrastructure meets TIA/EIA standards
- 2. Verifying network service availability
- 3. Documenting test results

Following this approach:

- Provides the highest level of assurance
- Avoids callbacks
- Reduces network downtime

# **Verifying Network Services**

The Network Service Module tests link connectivity, network services and Power over Ethernet to verify network services.

# Link connectivity

The Network Service Module uses the IP Ping function to bounce packets off key network devices including servers and gateways, and then measure the response time. Successful execution of a Ping establishes that the link supports communication on the network. Where a DHCP (Dynamic Host Configuration Protocol) server is active on the network, the Network Service Module will obtain its IP address from the DHCP server and then ascertain the IP addresses of other devices on the network.

# **Network service availability**

The Network Service Module measures the utilization of the link under test as a percentage of total available bandwidth. The Network Service Module can blink the activity light of the port to which it is connected to verify proper port connection. The Network Service Module will report the characteristics and capabilities of the hub or switch. In troubleshooting mode this lets a technician quickly determine whether a work area outlet is connected to the desired device and port, and which services are available.

#### Power over Ethernet (PoE)

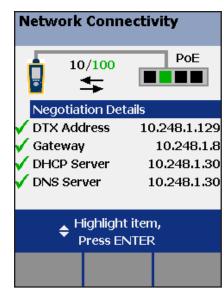
A growing number of products rely on Power over Ethernet (PoE) over twisted-pair cable for operating current. Voice over Internet Protocol (VoIP) telephones and 802.11 Wireless Access Points are the two most common. The Network Service Module verifies that the Power Supply Equipment (PSE) is delivering current in compliance with the IEEE 802.3af standard. Furthermore, the DTX can create Wiremaps of cable links that support PoE, even if they are powered by Midspan PoE supplies.

Expand your vision into the network with the DTX-NSM Network Service Module.



### **Features**

- Verify network service availability –
  determines whether a telecom outlet
  is active, identifies its data rates up to
  1Gbps, and whether power is available
  for PoE.
- Check link utilization and error conditions – measures the utilization of the link under-test as a percentage of available bandwidth; identifies broadcast traffic and the presence of network errors.
- Port identification blinks switch/hub port light; verifies if the link is connected to the proper port or determines where a work area outlet is connected.
- Verify link connectivity to the network
  up to 1 Gigabit Ethernet uses the
  DHCP server to get an IP address,
  Pings the default router and DNS Server
  at 10Mbps, 100Mbps or 1Gbps. Or you
  can assign IP addresses manually to
  ping network devices.
- Verify PoE verifies availability and voltage levels for links connected to power sourcing equipment to supply powered devices for Power over Ethernet applications such as VoIP and Wireless Access Points.
- Documents both cabling link certification and network availability and link connectivity test results in a consolidated report using LinkWare.
- Troubleshoot link determines whether performance problems are cabling or network-related.



View the Negotiation Details screen to see details of the connection including PoE status.



Document all the network tests executed as an integrated part of the cable certification documentation provided by LinkWare.

# **Ordering Information**

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Model	Description	
DTX-NSM	DTX Network Module:	
	includes one module that	
PILLINES DECAMENTES DECAMENTES DESCRIPTIONS SOURCE MEDICAL	plugs into the back of	
	the main unit of the	
	DTX CableAnalyzer	

Negotiation De 100 MBit	etails
Connection:	Full Duplex
MDI Crossover Sta	atus: MDI
Pin Reversal:	No
Supported	l Speeds
Half Duplex:	10/100 MBit
Full Duplex:	10/100 MBit
Power Over	Ethernet
Power On Pairs:	4,5-7,8
Adequate Power:	Yes

Verify link connectivity with key devices like severs or gateways using the Ethernet Ping function.

Traffic Monitor					
Running:	00:05:03				
Туре	Last 1s	Avg	Peak		
Utilization Collisions Errors Broadcasts	1% 0% 0% 54%	0%			
Sound On	Stop	R	Reset		

The DTX-NSM module shows the traffic on the linkunder-test. The traffic is captured and analyzed every second; the unit also tracks the average of each parameter and a "high-water mark."

### N E T W O R K S U P E R V I S I O N

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