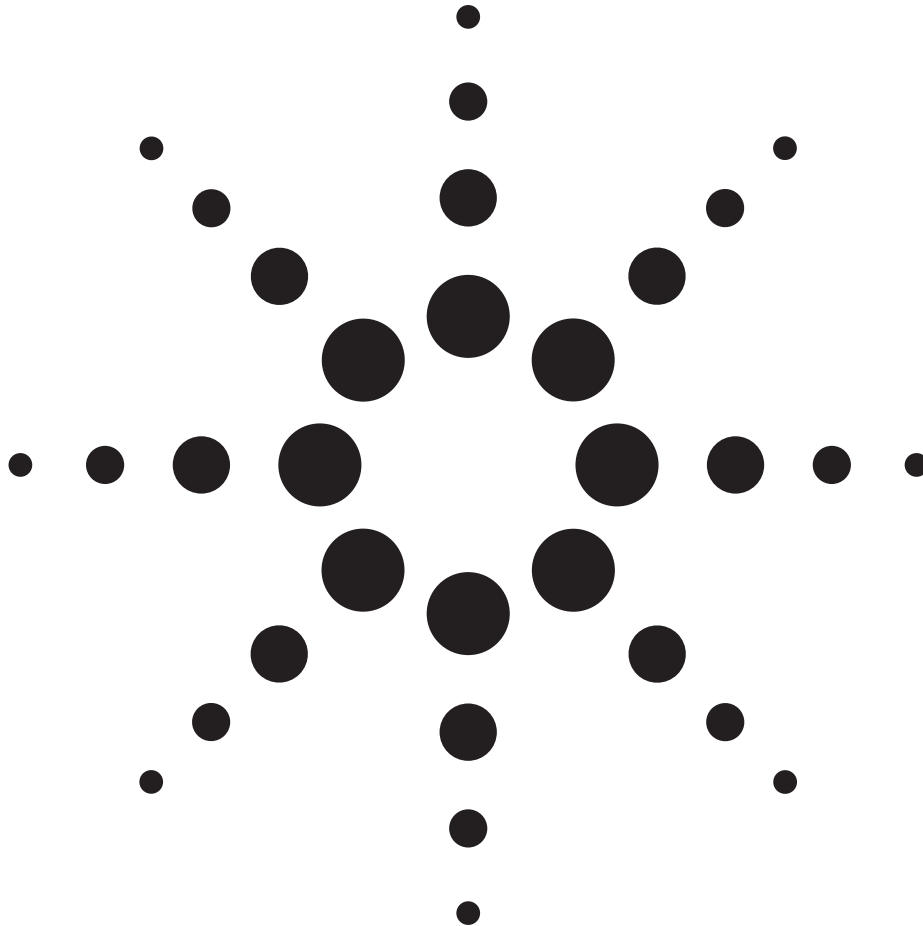


Agilent N2X Configuration Guide



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Agilent Technologies

Agilent N2X

N2X Overview

Agilent N2X is the industry's most comprehensive test solution for testing the development and deployment of network services for converging network infrastructures. Service Providers, Network Equipment Manufacturers (NEMs), and component manufacturers can verify service attributes of entire networks end-to-end, while also isolating problems down to individual networking devices and subsystems.

The Agilent N2X Multiservices Test Solution is the first to combine leading-edge services testing such as Metro Ethernet, MPLS L2/3 VPNs, Triple-play services and Multicast services, over the latest converging infrastructures such as MPLS, IPV6, and next generation SONET/SDH. N2X can test a wide variety of network infrastructure implementations from the edge/access through metro transport and core via a broad range of interfaces from 10/100/1000 Mbps Ethernet through to the industry's only 40Gbps OC768.

N2X System Components

The Agilent N2X test system includes several hardware and software components.

The N2X hardware consists of a system controller and multiple chassis containing purpose-built Test Cards for specific test requirements.

- **System Controller** – Provides a graphical interface to drive applications running on the Test Cards.
- **Chassis** – The highly compact 4-slot Chassis and 2-slot portable chassis are available for both development environment and in-field use.

- **Interface Cards** – High-density, scalable and flexible N2X Test Cards are optimized for specific test needs of Next Generations Transport, Carrier Routing, Enterprise networks and devices. Each card features its own high-performance on-board CPU and distributed processing power to allow synchronized performance measurements across multiple chassis.

The N2X software consists of Base Software, Protocol Software and Productivity Advantage Software. The N2X software licenses are installed on the System Controller.

- **Base Software** – Enables test capabilities for transport (SONET/SDH) or packet/protocol (IP) testing.
- **Protocol Software** – The N2X Protocol Software provides protocol emulation covering a wide range of network protocols.
- **Productivity Advantage Software** – The N2X Productivity Advantage delivers a rich set of automation tools designed to maximize testing productivity.

N2X Co-existence

Agilent N2X ensures application and chassis co-existence. Software application co-existence implies N2X Packets & Protocols application (E7880B or E7881B) and N2X Multi-services Transport application (J7251A) can operate simultaneously on the same controller. Also any combination of XR, XS and XM cards can be used in same chassis.

N2X also supports version co-existence functionality that enables different versions of the same application to be operated simultaneously.

N2X Test Solution Bundles

It is recommended the N2X chassis, system controller and software be ordered with the N2X test solution bundles to ensure optimum value.

Currently available bundles are:

- N5555A Packets and Protocols Test Solution Bundle
- N5556A Multi-services Transport Test Solution Bundle

Please follow steps 1, 2 and 3 in the next sections to select the proper options of the bundle.

Configuring your N2X test system

In order to configure your N2X system, please go through the following steps:

- Step 1. Choose your required test solution
- Step 2. Choose chassis
- Step 3. Choose System Controller
- Step 4. Choose Base Software License
- Step 5. Choose Protocol Software License
- Step 6. Choose Productivity Advantage Software
- Step 7. Choose Test Interface Cards for your N2X system (Not ordered via test solution bundle)
- Step 8. Choose Accessories
- Step 9. Other Products
- Step 10. Final Check

The following section will guide you through configuring your new N2X test solution. For add-ons to existing systems, order without using the N5555A or N5556A bundles.

Step 1: Choose your required test solution

N5555A - N2X Packets & Protocols Test Solution		N5556A - N2X Multi-Services Transport Test Solution	
Configure Bundle		Configure Bundle	
Chassis		Chassis	
N5540A	• N2X 2-slot Portable Chassis	N5540A	• N2X 2-slot Portable Chassis
N5541A	• N2X 4-slot Chassis	N5541A	• N2X 4-slot Chassis
N5542A	• N2X 4-slot Chassis with ext BITS/MITS clock input	N5542A	• N2X 4-slot Chassis with ext BITS/MITS clock input
Controller		Controller	
N5543E	• N2X Laptop	N5543E	• N2X Laptop
N5544C	• N2X Rackmount	N5544C	• N2X Rackmount
N5545C	• N2X High Performance Rackmount	N5545C	• N2X High Performance Rackmount
Base Software		Base Software	
E7880B	• Packets Application	J7251A	• Multi-Services Transport Application
E7881B	• Packets & Protocols Application		
Support		Support	
PS-S12-101	• 1yr software support & updates (included)	PS-S12-101	• 1yr software support & updates (included)
PS-S12-102	• 2yr software support & updates	PS-S12-102	• 2yr software support & updates
PS-S12-103	• 3yr software support & updates	PS-S12-103	• 3yr software support & updates

Step 2: Choose an N2X chassis

Order #	Description	Requires	Literature # & URL
N5555A-N5540A	N2X 2-slot Portable Chassis	N5540A	5859-1531EN
N5541A	Include N2X chassis-to-chassis cable		
N5555A-N5541A	N2X 4-slot Chassis		5859-1531EN
N5541A-059	Include N2X chassis-to-chassis cable		
N5555A-N5542A	N2X 4-slot Chassis with ext BITS/MTS clock input		5859-1531EN
N5542A-059	Include N2X chassis-to-chassis cable		

Note:

- At least one system chassis is required per N2X test system.
- Only one N2X chassis per bundle can be ordered. If multiple chassis are required for your N2X test system, they must be ordered individually and not part of the bundle.
- Multiple Bundles can be ordered.
- New chassis is shipped with 1-year-Return-to-Agilent warranty. 3-year-Return-to-Agilent warranty is available by choosing option R-51B-001-3C.
- All chassis require calibration due to internal clock. They are on a 8-year calibration cycle.
- Multiple chassis can be stacked to build larger scale system accommodating more interface cards. If multiple-chassis connectivity is required, order the N554xA-059 with each chassis.

Step 3: Choose an N2X System Controller

Order #	Description	Requires	Literature # & URL
N5555A-N5543E	2X Laptop Controller. (Intel core 2 duo 2.26GHz, 2GB RAM, 800MHz DDR2 SDRAM, 80GB HDD, WiFi link, DVD/CDRW, Optical mouse, 14.1" widescreen display, one LAN port)		5990-3950EN
NN5543E-053	N2X 8-port system switch (provided as standard with solution bundle)		
N5543E-055	N2X 24-port system switch		
N5555A-N5544C	N2X Rackmount Controller (Dual Core 2.0Ghz CPU, 2GB RAM, 80GB HDD, DVD/CDRW, two LAN Ports (both ports are 10/100/1000 BaseT))		5990-3950EN
N5544C-AQ2	Flat Panel Display		
N5544C-053	N2X 8-port system switch (provided as standard with solution bundle)		
N5544C-055	N2X 24-port system switch		
N5544C-001	Supply and install 5 Microsoft Terminal Server user licenses		
N5544C-002	Supply and install 10 Microsoft Terminal Server user licenses		
N5555A-N5545C	N2X High Performance Rackmount Controller (Dual (2x) Dual Core 2.0Ghz CPU, 4GB RAM, 80GB HDD, DVD/CDRW, two LAN Ports)		5990-3950EN
N5545C-AQ2	Flat Panel Display		
N5545C-053	N2X 8-port system switch		
N5545-055	N2X 24-port system switch (provided as standard with solution bundle)		
N5545C-001	Supply and install 5 Microsoft Terminal Server user licenses		
N5545C-002	Supply and install 10 Microsoft Terminal Server user licenses		

Note:

1. At least one system controller is required per N2X test system.
2. Only one N2X system controller per bundle can be ordered. If multiple controllers are required for your N2X test system, they must be ordered individually and not part of the bundle.
3. Multiple Bundles can be ordered.
4. New controller is shipped with 1-year-Return-to-Agilent warranty. 3-year-Return-to-Agilent warranty is available by choosing option R-51B-001-3C.
5. The Laptop Controller N5543E supports only one local user.
6. An Ethernet Switch is required for System Controllers that will connect to more than one N2X chassis.

Step 4: Choose an N2X Base Software License

Order #	Description	Requires	Literature # & URL
N5555A-E7880B	Packet Application Software		5988-9860EN
PS-S12-102	1 year software and support contract extended to 2 years	E7880B	
PS-S12-103	1 year software and support contract extended to 3 years	E7880B	
PS-S12-601	Annual Renewal for E7880B Software Support Contract	E7880B	
N5555A-E7881B	Packet & Protocols Application Software.		5988-9949EN
PS-S12-102	1 year software and support contract extended to 2 years	E7881B	
PS-S12-103	1 year software and support contract extended to 3 years	E7881B	
PS-S12-601	Annual Renewal for E7881B Software Support Contract	E7881B	
N5556A-J7251A	Multi-Services Transport Software		
J7251A-AJL	Include Multi-Services user documentation and software media.		
J7251A-NOSW	Do not include user documentation and software media.		

Note:

1. At least one base software license (among E7880B, E7881B, and J7251A) has to be ordered for a N2X Test System.
2. The E7880B Packet Application Software is a subset of the E7881B Packets & Protocols Application Software
3. PS-S12-101 1 year software and support contract included with initial purchase of base application software.

Step 5: Choose an N2X Protocol Software License

Order #	Description	Requires	Literature # & URL
N5555A-E7828A	IGMP Protocol Emulation Software License	E7881B	5989-6940EN
N5555A-E7829A	DHCP, IGMP, PPPoX and L2TP Emulation Bundle Software License	E7881B	URL
N5555A-E7875A	L2 VPN BGP Emulation Software	E7881B, E7882A, E7883A	
N5555A-E7876A	L2 VPN Emulation Software Bundle (BGP + LDP)	E7881B, E7882A, E7883A	
N5555A-E7877A	IPTV Video Traffic Generation and Analysis License	E7880B or E7881B	5989-3340EN
N5555A-E7882A	IPv4 Routing Emulation Software License	E7881B	5988-9950EN
N5555A-E7883A	MPLS Signaling Emulation Software License	E7881B	5988-9951EN
N5555A-E7884A	L2 MPLS VPN Application Software License	E7881B, E7882A & E7883A	5988-9952EN
N5555A-E7885A	IPv6 Routing Emulation Software License	E7881B & E7882A	5989-1643EN
N5555A-E7886A	Multicast Routing Emulation Software License	E7881B, E7882A & E7885A	5989-1544EN
N5555A-E7887A	DHCP Protocol Emulation Software License	E7881B	5989-4743EN
N5555A-E7888A	Access Protocol Emulation Software License	E7881B	5989-4747EN
N5555A-E7889A	Optical Signaling Emulation Software License	E7881B & E7882A	5989-1546EN
N5555A-E7896A	DHCPv6 Protocol Emulation Software License	E7881B	5989-5853EN
N5555A-E7897A	MLD Protocol Emulation Software License	E7881B	5989-6129EN
N5555A-E7898C	IPv6 Access Protocol Bundle (DHCPv6 + MLD + IPv6 for PPPoX)	E7881B	5989-3340EN
N5555A-E7879A	MPLS OAM Emulation Software License	E7881B & E7883A	5989-5699EN
N5558A	HDMI solution Bundle		
N5555A-N5566A	Synchronous Ethernet ESMC Emulation Software	E7881B	5990-4386EN
N5555A-N5568A	IEEE 1588v2 Precision Time Protocol Emulation Software	E7881B	5990-4884EN
N5555A-N5572A	Microsoft TV Protocol Decodes Software License (see note below)	E7881B & E7877A	5989-3340EN
	Integrated L2-7 Solution Bundle – Comprises N5575A and N5576A		
N5555A-N5575A	Stateful TCP Traffic and Measurement Software License	E7881B	5989-6439EN
			Demo Video
N5555A-N5576A	Data Application Simulation Software License	E7881B	5989-6439EN
N5555A-N5577A	HTTP Protocol Emulation Software License	E7881B	5990-4119EN
			Demo Video
N5555A-N5580A	Spanning Tree Protocol (STP, RSTP & MSTP) Emulation Software	E7881B	5989-6554EN
N5555A-N5581A	Ethernet OAM CFM Emulation Software License	E7881B	5989-7149EN
			Demo Video
N5555A-N5582A	LACP Emulation Software License	E7881B	5989-6155EN
N5555A-N5583A	BFD Emulation Software License	E7881B	5989-6635EN
			Demo Video
N5555A-N5585A	Ethernet OAM Y.1731 Emulation Software License	E7881B	5989-7533EN
			Demo Video
N5555A-N5588A	SIP emulation software license	E7881B	5989-8610EN
N5555A-N5589A	Link OAM (802.3ah) Emulation Software License	E7881B	5990-4029EN
N5555A-N5595A	ANCP emulation software license	E7881B	5989-8609EN
N5555A-N5599A	IPv6 Capabilities for PPPv6	E7881B	5989-1643EN
E7849A-N5600A	IPv4 and IPv6 Capabilities for PPPv6 Starter Bundle	E7881B	

Note:

1. Technical and software support for protocol software is included with support options for E7881B.
2. Protocol software license is installed in the controller. As the result, the number of protocol software license has to match the

number of controller you want to enable the protocol.

3. N5572A also requires the customer to have a valid MSTV license agreement with Microsoft Corporation. Customers and users must be network operators that are licensees of Microsoft IPTV products, or

equipment manufacturers that support Microsoft IPTV products on behalf of such a licensed network operator. Please contact DNO prior to quoting or ordering this product.

Step 6: Choose an N2X Productivity Advantage Software

N2X Productivity Advantage includes three levels of automation tools: QuickTests, Productivity Applications, and Conformance Test Suites. QuickTests is free of charge. (N2X Productivity Advantage Brochure: [5989-3237EN](#))

Productivity Applications

Order #	Description	Requires	Literature # & URL
N5555A-N5570A	IPTV Quality of Experience Productivity Application	E7881B	5989-3340EN
N5555A-N5571A	High Availability Productivity Application Software	E7881B & E7882A & E7883A	5989-3272EN
N5555A-N5574A	IPTV Quality of Experience Productivity Application for IPv6	E7881B & E7882A & E7883A	5989-3340EN Demo Video

Conformance Test Suites (CTS)

Order #	Description	Requires	Literature # & URL
N5555A-N5590A	MEF 9 Conformance Test Suite Software	E7880B or E7881B	5989-2905EN
N5555A-N5591A	MEF 14 Conformance Test Suite Software	E7880B or E7881B	5989-2905EN
N5555A-N5592A, N5593A, N5594A	MEF 21 Conformance Test Suite Software	E7880B or E7881B	5989-5133EN
N5555A-N5701A	IPv6 Conformance Test Suite Software	E7880B or E7881B	5989-4775EN
N5555A-N5702A	OSPFv3 Conformance Test Suite Software	E7880B or E7881B	5989-4775EN
N5555A-N5704A	BGP4 Conformance Test Suite Software	E7880B or E7881B	5989-4775EN
N5555A-N5705A	IS-IS Conformance Test Suite Software	E7880B or E7881B	5989-4775EN
N5555A-N5706A	OSPFv2 Conformance Test Suite Software	E7880B or E7881B	5989-4775EN
N5555A-N5707A	PIM-SM Conformance Test Software	E7880B or E7881B	5989-5140EN
N5555A-N5708A	MLDv2 Conformance Test Software	E7880B or E7881B	5989-5140EN
N5555A-N5709A	IGMPv3 Conformance Test Software	E7880B or E7881B	5989-5140EN
N5555A-N5710A	MPLS RSVP-TE Conformance Test Software	E7880B or E7881B	5989-5139EN
N5555A-N5711A	MPLS LDP Conformance Test Software	E7880B or E7881B	5989-5139EN
N5555A-N5712A	STP Conformance Test Software	E7880B or E7881B	5989-5133EN
N5555A-N5713A	RSTP Conformance Test Software	E7880B or E7881B	5989-5133EN
N5555A-N5714A	MSTP Conformance Test Software	E7880B or E7881B	5989-5133EN
N5555A-N5715A	LACP Conformance Test Software	E7880B or E7881B	5989-5133EN
N5555A-N5716A	802.1x Conformance Test Software	E7880B or E7881B	5989-5133EN
N5555A-N5717A	VLAN Conformance Test Software	E7880B or E7881B	5989-5133EN
N5555A-N5718A	CFM Conformance Test Software	E7880B or E7881B	5989-5133EN
N5555A-N5719A	BFD Conformance Test Software	E7880B or E7881B	5989-4775EN
N5555A-N5725A	Graceful Restart Conformance Test Suite Software	E7880B or E7881B	5989-4775EN

Conformance Test Suites (CTS) - Continued

Optional Support Products for CTS

Order #	Description	Requires	Literature # & URL
PS-S12-102	1 year Software and Support Contract extended to 2 years	Corresponding CTS licence	
PS-S12-103	1 year Software and Support Contract extended to 3 years	Corresponding CTS licence	
PS-S12-601	Annual Renewal for Software Support Contract	Corresponding CTS licence	

Note:

1. Technical and software support for Productivity Application (N5570A and N5571A) is included with support options for E7881B.
2. Please check the datasheets for the minimal test port number and port type required by each conformance test suite you choose. To enable full functionality of test suites, the hardware requirements have to be met.
3. Customers with R5.x CTS licenses can upgrade to the R6.x equivalent by purchasing the basic license.

Step 7: Choose Test Interface Cards for your N2X system

• N2X XR/XR-2 Test Cards

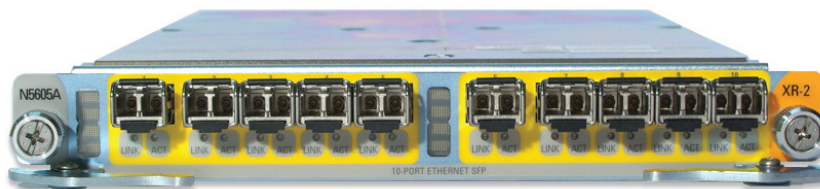
Packets and Protocols Test Cards for integrated traffic generation and realistic protocol emulation for dynamic network testing.

• N2X XS/XS-2 Test Cards

High-performance Packets and Protocols Test Cards optimized to deliver the industry's highest protocol emulation scalability for network stress testing.

• N2X XM Test Cards

SONET/SDH Test Cards for simulation and analysis of multi-channel loading, errors, alarms and switching performance.



N5605A 10-port Ethernet SFP XR-2 Test Card

XR/XR-2 Packet and Protocol Test Cards

Order #	Description	Requires	Literature # & URL
E7906A	16-port 10/100 Ethernet XR Test Card		5988-8482EN
E7907A	2-port OC-3c/OC-12c ATM/POS/FR routing test card		5988-5019EN
E7907A-001	Single Mode Intermediate Reach Optics		
E7907A-002	Multimode Optics		
E7909A	2-port OC-48c POS/FR XR Test Card		5988-5017EN
E7909A-001	Single Mode Intermediate Reach Optics		
N5550B	4-port 10/100 Ethernet XR-2 Test Card		5989-4586EN
N5551B	4-port 10/100/1000 Electrical/Optical XR-2 Test Card (SFP/RJ45)		5989-4586EN
N5551B-001	1000Base-SX SFP		
N5551B-002	1000Base-LX SFP		
N5551B-003	1000Base-ZX SFP		
N5602A	1-port 10G POS & Ethernet LAN/WAN XFP XR-2 Test Card		5989-5738EN
N5602A-001	1310nm XFP		
N5602A-002	1550nm XFP		
N5603A	1-port 10G Ethernet LAN/WAN XFP XR-2 Test Card		5989-5738EN
N5603A-001	1310nm XFP		
N5603A-002	1550nm XFP		
N5604A	4-port 10/100/1000 Ethernet and EPON Monitor Card		5989-4141EN
N5604A-001	1000Base-SX SFP		
N5604A-002	1000Base-LX SFP		
N5604A-003	1000Base-ZX SFP		
N5604A-004	1000Base-BX10-U SFP		
N5604A-005	1000Base-PX20-D SFP		
N5605A	10-port SFP Ethernet XR-2 Test Card		5989-9212EN
N5605A-001	1000Base-SX SFP		
N5605A-002	1000Base-LX SFP		
N5605A-003	1000Base-ZX SFP		
N5605A-004	10/100/1000Base T SFP		
N5606A	10-port 10/100/1000BASE-T Ethernet XR-2 Test Card		5989-9212EN

XS/XS-2 SONET/SDH Test Cards

Order #	Description	Requires	Literature # & URL
E7320B	1-port 40G XS Test Card (includes chassis)		5989-1530EN
E7907B	2-port OC-3c/OC-12c ATM/POS/FR XS Test Card		5988-5019EN
E7907B-001	Single Mode Intermediate Reach Optics		
E7907B-002	Multimode Optics		
E7909B	2-port OC-48c POS/FR XS Test Card		5988-5019EN
E7909B-001	Single Mode Intermediate Reach Optics		
N5630B	2-port 10/100/1000 Electrical/Optical XS-2 Test Card (SFP/RJ45)		5989-4586EN
N5630B-001	1000Base-SX SFP		
N5630B-002	1000Base-LX SFP		
N5630B-003	1000Base-ZX SFP		
N5632A	1-port 10G POS & Ethernet LAN/WAN XFP XS-2 Test Card		5989-5738EN
N5632A-001	1310nm XFP		
N5632A-002	1550nm XFP		

XM Cards – Multiservices Transport Test Cards

Order #	Description	Requires	Literature # & URL
J7241A	N2X 1-port OC-192/STM-64 Multi-channel XM Test Card (1550nm)		5988-6665EN
J7241A-609	FC/PC optical connectors (exchangeable)		
J7241A-610	SC optical connectors (exchangeable)		
J7241A-611	ST optical connectors (exchangeable)		
J7242A	N2X 1-port OC-192/STM-64 Multi-channel XM Test Card (1310nm)		5988-6665EN
J7242A-609	FC/PC optical connectors (exchangeable)		
J7242A-610	SC optical connectors (exchangeable)		
J7242A-611	ST optical connectors (exchangeable)		
J7244A	N2X 2-port OC-48/STM-16 Multi-rate/channel XM Test Card (1550nm)		5988-6785EN
J7244A-001	OC-48/STM-16 Single-port module (1550nm)		
J7244A-002	OC-48/STM-16 Dual-port module (1550nm)		
J7244A-010	Adds multi-channel VT/TU capability to XM OC48/STM16 multi-rate module. Order quantity to match module port count. Recommend high end controller for VT/TU applications.		
J7244A-609	FC/PC optical connectors (exchangeable)		
J7244A-610	SC optical connectors (exchangeable)		
J7244A-611	ST optical connectors (exchangeable)		
J7245A	N2X 2-port OC-48/STM-16 Multi-rate/channel XM Test Card (1310nm)		5988-6785EN
J7245A-001	OC-48/STM-16 Single-port module (1310nm)		
J7245A-002	OC-48/STM-16 Dual-port module (1310nm)		
J7245A-010	Adds multi-channel VT/TU capability to XM OC48/STM16 multi-rate module. Order quantity to match module port count. Recommend high end controller for VT/TU applications.		
J7245A-609	FC/PC optical connectors (exchangeable)		
J7245A-610	SC optical connectors (exchangeable)		
J7245A-611	ST optical connectors (exchangeable)		

Note:

1. New interface cards are shipped with 1-year-Return-to-Agilent warranty. 3-year-Return-to-Agilent warranty is available by choosing option R-51B-001-3C.
2. To enable traffic generation and analysis capability, XR, XS cards need E7880B or E7881B base software license. To enable protocol emulation capability, XR and XS cards need E7881B base software license. The E7880B is a subset of the E7881B.
3. J7251A Multi-Services Transport Software base software license is required to enable the XM cards.

Step 8: Choose Accessories for your N2X system

Order #	Description	Requires	Literature # & URL
E7900-00035	Rackmount kit for N2X 4-slot chassis.		
E7900-64207	N2X/RT900 4 slot chassis to chassis cable		
E7900-64208	N2X/RT900 rack to rack cable		
E7900-64209	N2X/RT900 module to chassis cable		
E7912-80006	Soft carry bag for 2-slot N2X chassis		
E7900-80006	Soft carry bag for 4-slot N2X chassis		
E7912-80012	Hard transit case for 2-slot N2X chassis		
E7900-80012	Hard transit case for 4-slot N2X chassis		
E7901-64210	RJ-45 LAN CABLE. Length 2m		
J7250A-010	Upgrades N2X 2.5Gb/s multi-rate module, adding multi-channel VT/TU capability	J7244A or J7245A	
J7283A	FC/PC connector (exchangeable)		
J7284A	SC connector (exchangeable)		
J7285A	ST connector (exchangeable)		

Step 9: Other Products

Order #	Description	Requires	Literature # & URL
N5610A	HDMI Ethernet Converter		

Step 10: Final Check

Please double check the configuration to make sure all the hardware and software you need have been selected with correct quantity and compatibility.

- N2X Chassis
- System Controller
- Base Software License
- Test Cards
- Protocol Software Licenses
- Productivity Advantage Software licenses
- Accessories

Appendix: Ordering Sample

Here is an ordering sample showing how to select N2X components and corresponding options.

Product #	Description	Quantity
N5555A	N2X Packets & Protocols Test Solution	1
N5555A-N5541A	N2X 4-slot Chassis	1
R-51B-001-3C	1 year Return-to-Agilent warranty extended to 3 years	1
N5555A-N5544C	N2X Rackmount Controller	1
N5544C-001	Supply and Install 5 Microsoft Server user licenses	1
R-51B-001-3C	1 year Return-to-Agilent warranty extended to 3 years	1
N5555A-E7881B	Packet & Protocols Application Software	1 (match the number of controller)
E7881B-AJL	Include user documentation	1
PS-S12-103	1 year software and support contract extended to 3 years	1
N5555A-E7882A	IPv4 Routing Emulation Software License	1
N5555A-E7883A	MPLS Signaling Emulation Software License	1
N5555A-E7884A	L2 MPLS VPN Application Software License	1
N5555A-E7885A	L2 MPLS VPN Application Software License	1
N5555A-E7886A	IPv6 Routing Emulation Software License	1
N5555A-E7887A	DHCP Protocol Emulation Software License	1
N5555A-E7888A	Access Protocol Emulation Software License	1
N5555A-E7889A	Optical Signaling Emulation Software License	1
N5555A-N5570A	IPTV QoE Productivity Application	1
N5555A-N5571A	High Availability Productivity Application Software	1
N5555A-N5701A	IPv6 Conformance Test Suite Software	1
N5701A-001	IPv6 Basic CTS License	1
N5701A-002	IPv6 Extension CTS License	1
N5701A-003	IPv6 Security CTS License	1
PS-S12-103	1 year software and support contract extended to 3 years	1
N5555A-N5704A	BGP4 Conformance Test Suite Software	1
N5704A-001	BGP4 Basic CTS License	1
N5704A-002	BGP4 Extension CTS License	1
PS-S12-103	1 year software and support contract extended to 3 years	1
N5555A-N5725A	Graceful Restart Conformance Test Suite Software	1
N5725A-001	GR Basic CTS License	1
PS-S12-103	1 year software and support contract extended to 3 years	1
N5551B	4-port 10/100/1000 Electrical/Optical XR-2 Test Card	2
R-51B-001-3C	1 year Return-to-Agilent warranty extended to 3 years	2
N5551B-001	1000Base-SX SFP	8 (match number of ports)
N5551B-002	1000Base-LX SFP	8 (match number of ports)
E7909A	2-port OC-48c POS/FR XR Test Card	2
R-51B-001-3C	1 year Return-to-Agilent warranty extended to 3 years	2

Agilent N2X

Agilent's N2X multi-service tester combines leading-edge services with carrier grade infrastructure testing and emulation. The N2X solution set allows network equipment manufacturers and service providers to more comprehensively test new services end-to-end, resulting in higher quality of service and lower network operating costs.

Software and Support Agreement

To protect your investment in the Agilent N2X, every new system includes an initial 12-month comprehensive system-based warranty and Software and Support Agreement (SSA).

Renewing Agilent support services ensures uninterrupted technical support and software upgrades, giving you confidence in N2X throughout the life of your system. The N2X technical support portion of your SSA includes assistance with product operation and measurements, and verification that the N2X equipment is in correct working order.

Warranty and Support

Hardware Warranty

All N2X hardware is warranted against defects in materials and workmanship for a period of 1 year from the date of shipment.

Software Warranty

All N2X software is warranted for a period of 90 days. The applications are warranted to execute and install properly from the media provided.

This warranty only covers physical defects in the media, whereby the media is replaced at no charge during the warranty period.

Ordering Information

To order and configure the test system, consult your local Agilent field engineer.

Sales, Service and Support

N2X must be serviced by an approved Agilent Technologies service centre, please contact us for more information.

United States:

Agilent Technologies
Test and Measurement Call Center
P.O. Box 4026
Englewood, CO 80155-4026

1-800-829-4444

Canada:

Agilent Technologies Canada Inc.
2660 Matheson Blvd. E
Mississauga, Ontario
L4W 5M2
1-877-894-4414

Europe:

Agilent Technologies
European Marketing Organisation
P.O. Box 999
1180 AZ Amstelveen
The Netherlands
(31 20) 547-2323

United Kingdom

07004 666666

Japan:

Agilent Technologies Japan Ltd.
Measurement Assistance Center
9-1, Takakura-Cho, Hachioji-Shi,
Tokyo 192-8510, Japan
Tel: (81) 426-56-7832
Fax: (81) 426-56-7840

Latin America:

Agilent Technologies
Latin American Region Headquarters
5200 Blue Lagoon Drive, Suite #950
Miami, Florida 33126
U.S.A.
Tel: (305) 269-7500
Fax: (305) 267-4286

Asia Pacific:

Agilent Technologies
19/F, Cityplaza One, 1111 King's Road,
Taikoo Shing, Hong Kong, SAR
Tel: (852) 3197-7777
Fax: (852) 2506-9233

Australia/New Zealand:

Agilent Technologies Australia Pty Ltd
347 Burwood Highway
Forest Hill, Victoria 3131
Tel: 1-800-629-485 (Australia)
Fax: (61-3) 9272-0749
Tel: 0-800-738-378 (New Zealand)
Fax: (64-4) 802-6881

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