



Модуль Cisco Nexus N7K-M148GS-11

N7K-M148GS-11

Описание

[Архитектура Cisco Nexus 7000 \(ENG\)](#)
[Обзор Cisco Nexus 7000 \(RUS\)](#)
[Развёртывание Cisco Nexus 7000 в сетях ЦОД \(ENG\)](#)
[Устранение проблем с Nexus 7000 и NX-OS \(ENG\)](#)

Non-XL Mode	XL Mode	
MAC entries	128K	128K
IPv4 routes	128K	Up to 1M
IPv6 routes	64K	Up to 350K
NetFlow entries	512K	512K
ACL	64K	128K

Основные особенности:

- 48 портов 1000Base-X (SFP)
- Load sharing на все модули в пределах матрицы
- Distributed forwarding
- MPLS
- Аппаратная поддержка TrustSec
- Поддержка горячей замены OIR

Общие

Тип устройства

Карты расширения

Линейка Cisco

Nexus 7000

Производительность модульного коммутатора, Gbps	46
Совместимая платформа	Шасси N7K-C7009 Шасси N7K-C7010 Шасси N7K-C7018
Поддерживаемый тип интерфейсов модульного коммутатора	Интерфейсы 1000BaseX SFP
Совместимость с управляющими модулями	N7K-SUP2 N7K-SUP2E N7K-SUP1
Таблица маршрутизации IPv4/IPv6	128,000/64,000
Производительность маршрутизации, Mpps	60
Размер таблицы MAC адресов	128

Доп. описание

Техническая спецификация:

Items	Specifications	
		48-Port 10/100/1000 Ethernet Module (Copper)
Systems		
Software compatibility	Cisco NX-OS Software Release 4.0 or later (minimum requirement)	Cisco NX-OS Software Release 4.1 or later (minimum requirement)
Product compatibility	<ul style="list-style-type: none"> Supported in Cisco Nexus 7000 Series 9-, 10-, and 18-slot chassis Supported Fabric-1 or Fabric-2 fabric modules Supported SUP1, SUP2 or SUP2E Supervisor modules 	
Memory	1 GB DRAM	
Front-panel LEDs	<ul style="list-style-type: none"> Status: Green (operational), red (faulty), or orange (module booting) Link: Green (port enabled and connected), orange (port disabled), off (port enabled and not connected), or blinking green and orange in conjunction with ID LED blue (port flagged for identification; beacon) ID: Blue (operator has flagged this card for identification; beacon) or off (module not flagged) 	
Programming interfaces	<ul style="list-style-type: none"> XML Scriptable command-line interface (CLI) Cisco Data Center Network Manager (DCNM) GUI 	



Network management	• Cisco DCNM 4.0	
Reliability and availability	• OIR	• OIR
Physical Interfaces		
Connectivity	48 ports of 10/100/1000 Ethernet using RJ-45 connectors	48 ports of Gigabit Ethernet using SFP optics
Maximum port density	384 ports of 10/100/1000 Ethernet for 10-slot chassis and 768 ports of 10/100/1000 Ethernet for 18-slot chassis	384 ports of Gigabit Ethernet for 10-slot chassis and 768 ports of Gigabit Ethernet for 18-slot chassis
Time domain reflectometry (TDR)	Helps find cable faults	-
MAC security	All 48 ports have built-in IEEE 802.1AE MAC security and an AES cipher with a 128-bit key (requires a software license to enable)	
Queues per port	• Input: 2 queues and 4 thresholds (RX: 2q4t) • Output: 1 strict priority queue, 3 Deficit-Weighted Round-Robin (DWRR) queues, and 4 thresholds (TX: 1p3q4t)	
Scheduler	DWRR and Shaped Round-Robin (SRR)	
Port buffers	Ingress: 7.56 MB per port Egress: 6.15 MB per port	
Jumbo frame support for bridged and routed packets	Up to 9216 bytes	
Forwarding Engine: M Series		
Performance	60 Mpps Layer 2 and 3 IPv4 unicast and 30 Mpps IPv6 unicast	
MAC entries	128,000	
Forwarding information base (FIB) entries	128,000	
NetFlow entries	512,000 shared (ingress plus egress)	
VLANs	16,384 bridge domains and 4096 simultaneous VLANs per virtual device context (VDC)	



ACLs	64,000
Policers	16,000
Fabric Interface	
Switch fabric interface	46 Gbps in each direction (92 Gbps full duplex) distributed across up to five fabric modules
Online insertions and removal (OIR)	Online insertion and removal
Environmental	
Physical dimensions	<ul style="list-style-type: none">• Occupies one I/O module slot in a Cisco Nexus 7000 Series chassis• Dimensions (H x W x D): 1.733 x 15.3 x 21.9 in. (4.4 x 38.9 x 55.6 cm)• Weight: 14 lb (6.4 kg)
Power consumption	<ul style="list-style-type: none">• Typical: 358 watts (W)• Maximum: 400W
Environmental conditions	<ul style="list-style-type: none">• Operating temperature: 32 to 104°F (0 to 40°C)• Operational relative humidity: 5 to 90%, noncondensing• Storage temperature: -40F to 158°F (-40 to 70°C)• Storage relative humidity: 5 to 95%, noncondensing
Regulatory compliance	<ul style="list-style-type: none">• EMC compliance• FCC Part 15 (CFR 47) (USA) Class A• ICES-003 (Canada) Class A• EN55022 (Europe) Class A• CISPR22 (International) Class A• AS/NZS CISPR22 (Australia and New Zealand) Class A• VCCI (Japan) Class A• KN22 (Korea) Class A• CNS13438 (Taiwan) Class A



	<ul style="list-style-type: none">• CISPR24• EN55024• EN50082-1• EN61000-3-2• EN61000-3-3• EN61000-6-1• EN300 386
Environmental standards	<ul style="list-style-type: none">• NEBS criteria levels• SR-3580 NEBS Level 3 (GR-63-CORE, issue 3, and GR-1089-CORE, issue 4)• Verizon NEBS compliance• Telecommunications Carrier Group (TCG) Checklist• Qwest NEBS requirements• Telecommunications Carrier Group (TCG) Checklist• ATT NEBS requirements• ATT TP76200 level 3 and TCG Checklist• ETSI• ETSI 300 019-1-1, Class 1.2 Storage• ETSI 300 019-1-2, Class 2.3 Transportation• ETSI 300 019-1-3, Class 3.2 Stationary Use
Safety	<ul style="list-style-type: none">• UL/CSA/IEC/EN 60950-1• AS/NZS 60950