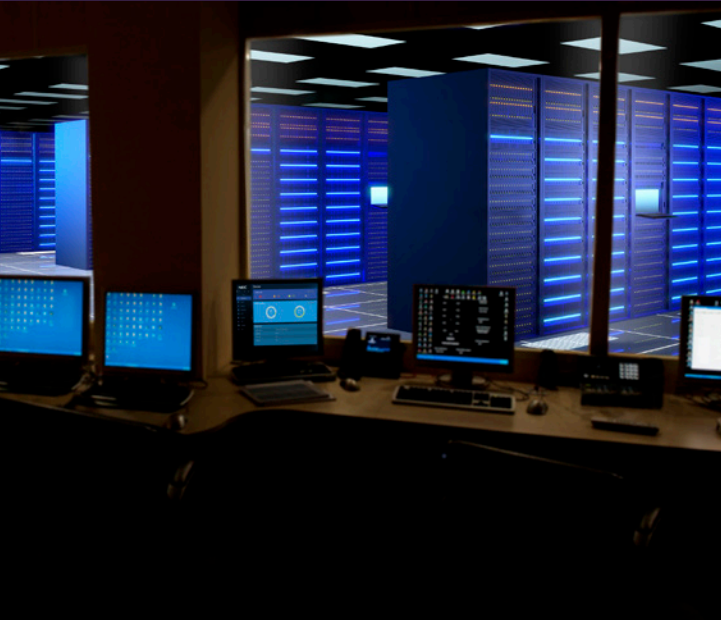\Orchestrating a brighter world

NEC

QX-S4100 Series PoE+ Gigabit Ethernet Switches

At a Glance

- Versatile Power over Ethernet Plus (PoE+) switches that can be utilized in SDN (OpenFlow) network environments as edge devices or standalone

- Connects to IP telephones or other devices that require PoE

- Supports NEC's ProgrammableFlow Controller Edge Automation capability which:

    ◇ Extends some of the SDN functions to non-OpenFlow switches

    ◇ Simplifies configuration and management of switch

- Saves time and expense by not having to install electrical power wiring

- Offers the flexibility of placing PoE devices where needed most and ability to relocate them easily

- Can be managed by the SDN Controller, WebGUI management console or Command Line Interface (CLI)

Overview

NEC's QX-S4100 Series Power over Ethernet Plus (PoE+) Gigabit switches offer businesses the flexibility to easily deploy PoE devices wherever needed. These versatile switches can be used as edge devices in a Software Defined Network (SDN) or they can be standalone. The QX-S4100 series fully supports NEC's ProgrammableFlow Controller (PFC) Edge Switch Automation capability, and can be configured and managed directly through the PFC's Graphical User Interface (GUI).

Since a PoE switch enables network cables to carry electrical power, installing additional power outlets is not required – saving time and expense. Another advantage is scalability – PoE enables quick and efficient deployment of network devices.

Main Product Features

- 8, 16, 24 and 48 PoE+ 10/100/1000 Ethernet Ports (can connect to IP phones and other PoE devices that require up to 30W)

- 2 or 4 Gigabit SFP Uplink ports

- Support for L2 and L3 forwarding, QoS, Security, Multicast, & VLAN

- CLI and WebGUI management console
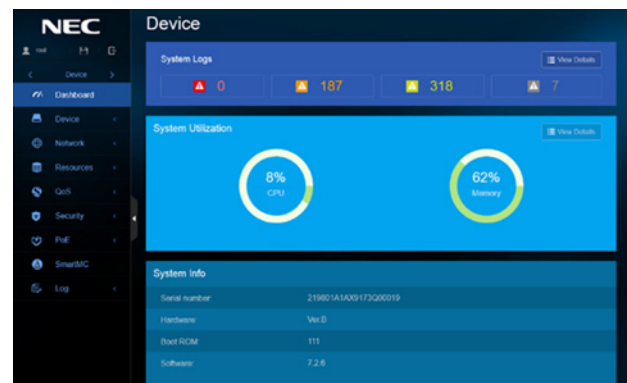
QX-S4100 Series WebGUI

Specifications

Features			S4108GT-2G-PW	S4116GT-4G-PW	S4124GT-4G-PW	S4148GT-4G-PW
Performance		Switching capacity [bps]	20.0G	40.0G	56.0G	104.0G
		Transfer rate [pps]	14.8M	29.7M	41.6M	77.3M
		Switching method	S&F			
		MAC address table	16K			
		Routing table (IPv4/IPv6)	64/64			
		ARP table	256			
Interface	1Gbe	10/100-1000BASE-T	8	16	28	48
		SFP slot	2	4	4c	4
	Console Port		√	√	√	√
PoE+		Number of power feedable interfaces	8	16	24	48
		Power feeding standard	IEEE802.3at			
		Maximum power supply amount per port	30.0W			
		Maximum power supply amount per device	125.0W	170.0W	370.0W	
IRF		IRF stack version	IRFv2			
		Maximum number of IRF stacks	4			
		MAD/ISSU	√ / -			
VLAN		IEEE802.1Q	√			
		Port VLAN	√			
		Protocol VLAN	√			
		Voice VLAN	√			
		Maximum number of VLAN [number of settable IP addresses]	4094[32]			
		VLAN mapping	√			
		QinQ	√			
Port function		Auto Negotiation/ fixed speed and duplex (full/half)	√ / √			
		Auto MDI • MDIX/ fixed MDIX	√ / √			
		Flow control (IEEE802.3X)	√			
		EAP transmitted/BPDU transmitted	√ / √			
		Port isolate	√			
		Packet transfer suppression	B/M/U			
		Storm-constrain	B/M/U			
		Jumbo Frame (byte)	10000			
		Loop detection (multi port loop supported)	√			
		One-way link detection (DLDP)	√			
		Ethernet OAM (IEEE802.3ah)	√			
		Link aggregation (LACP supported)	√			
Spanning tree			S/R/M/P			
Ring protocol (RRPP)			√			
Packet filter (ACL)			√			
IPv6 management			√			
QoS		PQ	√			
		WRR	√			
		Bandwidth control	LR/CAR/GTS			
		Trust/Marking	√ / √			
		Number of QoS classes	8			

√ = Available

- = Not Available

Specifications (cont.)

Features		S4108GT-2G-PW	S4116GT-4G-PW	S4124GT-4G-PW	S4148GT-4G-PW
Security	802.1X authentication	√			
	MAC address authentication	√			
	Web authentication	√			
	Triple authentication	√			
	Port security	√			
	Dynamic VLAN	PORT/MAC			
	Local authentication	√			
Routing related	Static	√			
	BFD	√			
Multicasting	Multicast VLAN	√			
	IGMPv1/v2/v3 snooping	√			
	MLDv1/v2 snooping	√			
SDN Ready	SDN supported	Edge Automation			
	Maximum flow entry	16K			
Management function	telnet/ssh/WEB console	√ / √ / √			
	FTP • TFTP client/FTP server	√ / √			
	LLDP	√			
	DHCP	C/R/SV/SN			
	NTP client/NTP server	√ / -			
	Syslog	√			
	Log file	√			
	SNMPv1/v2c/v3	√			
	Standard MIB, Private MIB	√			
	RMON	√			
	sFlow	√			
	Port mirroring	√			
Eco function	Scheduled task	√			
Physical specification	External dimension (W x D x H) [mm]	330 x 230 x 43.6		440 x 266 x 43.6	440 x 406 x 43.6
	Weight	2.8kg		4.6kg	6.4kg
	AC power input (50/60Hz)	100~240V (90~264V)			
	Maximum power consumption (PoE fed power included)	161W	226W	470W	494W
	Fanless	√	-		
	Operating temperature/humidity (non-condensing required)	0~50°/10~90%			

√ = Available

- = Not Available

S4108GT-2G-PW

S4116GT-4G-PW

S4124GT-4G-PW

S4148GT-4G-PW

For further information please contact your local NEC representative or:

North America (USA)
NEC Corporation of America
www.necam.com

South Asia (Singapore)
NEC Asia Pacific
www.nec.com.sg

Corporate Headquarters
(Japan) NEC Corporation
www.nec.com

Oceania (Australia)
NEC Australia Pte Ltd
www.nec.com.au

EMEA (Europe, Middle East, Africa)
NEC Enterprise Solutions
www.nec-enterprise.com

About NEC Corporation: NEC Corporation is one of the world's leading providers of Internet, broadband network and enterprise business solutions dedicated to meeting the specialized needs of its diverse and global base of customers. NEC delivers tailored solutions in the key fields of computer, networking and electron devices, by integrating its technical strengths in IT and Networks. The NEC Group employs more than 150,000 people worldwide. For additional information, please visit the NEC home page at: http://www.nec.com