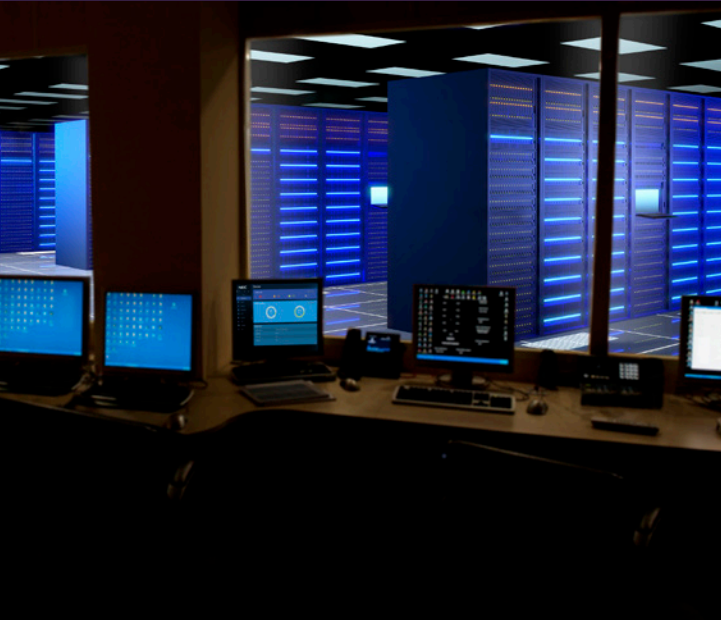


# QX-S4100 Series PoE+ Gigabit Ethernet Switches



## 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)

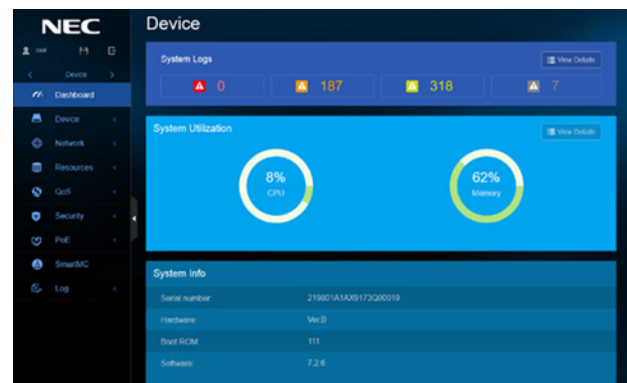
## Overview

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 |    |
|-----------------------------|--|-------------------|---------------|---------------|---------------|----|
| <b>Performance</b>          | 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               |               |               |               |    |
| <b>Interface</b>            | 1Gbe   | 10/100-1000BASE-T | 8             | 16            | 28            | 48 |
|                             |  | SFP slot          | 2             | 4             | 4c            | 4  |
|                             | Console Port   | √                 | √             | √             | √             |    |
| <b>PoE+</b>                 | 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        |               |    |
| <b>IRF</b>                  | IRF stack version  |                   |               |               | IRFv2         |    |
|                             | Maximum number of IRF stacks                             |                   |               |               | 4             |    |
|                             | MAD/ISSU   |                   |               |               | √ / -         |    |
| <b>VLAN</b>                 | IEEE802.1Q   |                   |               |               | √             |    |
|                             | Port VLAN  |                   |               |               | √             |    |
|                             | Protocol VLAN  |                   |               |               | √             |    |
|                             | Voice VLAN   |                   |               |               | √             |    |
|                             | Maximum number of VLAN [number of settable IP addresses] |                   |               |               | 4094[32]      |    |
|                             | VLAN mapping   |                   |               |               | √             |    |
|                             | QinQ   |                   |               |               | √             |    |
| <b>Port function</b>        | 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)                        |                   |               |               | √             |    |
| <b>Spanning tree</b>        |  |                   |               | S/R/M/P       |               |    |
| <b>Ring protocol (RRPP)</b> |  |                   |               | √             |               |    |
| <b>Packet filter (ACL)</b>  |  |                   |               | √             |               |    |
| <b>IPv6 management</b>      |  |                   |               | √             |               |    |
| <b>QoS</b>                  | 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    |                  |
|-------------------------------|--|-------------------------------------|------------------|-----------------|------------------|------------------|
| <b>Security</b>               | 802.1X authentication                                    |                                     |                  | √               |                  |                  |
|                               | MAC address authentication                               |                                     |                  | √               |                  |                  |
|                               | Web authentication                                       |                                     |                  | √               |                  |                  |
|                               | Triple authentication                                    |                                     |                  | √               |                  |                  |
|                               | Port security  |                                     |                  | √               |                  |                  |
|                               | Dynamic VLAN   |                                     |                  | PORT/MAC        |                  |                  |
|                               | Local authentication                                     |                                     |                  | √               |                  |                  |
| <b>Routing related</b>        | Static   |                                     |                  | √               |                  |                  |
|                               | BFD  |                                     |                  | √               |                  |                  |
| <b>Multicasting</b>           | Multicast VLAN   |                                     |                  | √               |                  |                  |
|                               | IGMPv1/v2/v3 snooping                                    |                                     |                  | √               |                  |                  |
|                               | MLDv1/v2 snooping  |                                     |                  | √               |                  |                  |
| <b>SDN Ready</b>              | SDN supported  |                                     |                  | Edge Automation |                  |                  |
|                               | Maximum flow entry                                       |                                     |                  | 16K             |                  |                  |
|                               | telnet/ssh/WEB console                                   |                                     |                  | √ / √ / √       |                  |                  |
|                               | FTP • TFTP client/FTP server                             |                                     |                  | √ / √           |                  |                  |
|                               | LLDP   |                                     |                  | √               |                  |                  |
|                               | DHCP   |                                     |                  | C/R/SV/SN       |                  |                  |
| <b>Management function</b>    | NTP client/NTP server                                    |                                     |                  | √ / -           |                  |                  |
|                               | Syslog   |                                     |                  | √               |                  |                  |
|                               | Log file   |                                     |                  | √               |                  |                  |
|                               | SNMPv1/v2c/v3  |                                     |                  | √               |                  |                  |
|                               | Standard MIB, Private MIB                                |                                     |                  | √               |                  |                  |
|                               | RMON   |                                     |                  | √               |                  |                  |
|                               | sFlow  |                                     |                  | √               |                  |                  |
|                               | Port mirroring   |                                     |                  | √               |                  |                  |
|                               | <b>Eco function</b>                                      | Scheduled task                      |                  |                 | √                |                  |
|                               |  | 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 |
| <b>Physical specification</b> | 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:

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