Panasonic

Switches Product Information

# ZEQUO RE Series

PN36243E/PN36241E

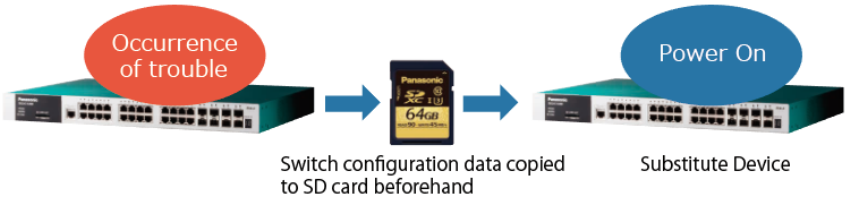
# Gigabit Layer 3 Stackable Switches

ZEQUO RE Series offers available network as a core switch.

## Rapid switch failure recovery

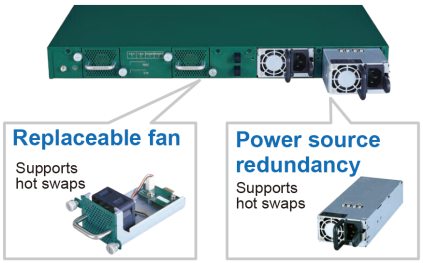
-Boot from a configuration file saved on an SD card

Prompt system recovery is possible without technical knowledge of network switch or PC.
There is no need for configuration tools to set up the replacement switch.




## Network resiliency

-Various modules achieve network with no down-time
Replaceable fan and Power souce redundancy




-Stacking (up to 4unit)
Stack connection ports on the front of the device make it easy to plug/unplug stacking cables.

## Manageable

-Industry-standard CLI
-Web-based GUI

Appropriate setting method can be selected according to the environment and demand

### Lineup

**ZEQUO 6700RE (PN36243E)**

10/100/1000T ×4 (4 combo)
SFP × 24 (20+4 combo)
SFP+/SFP ×4
Stacking ports ×2

**ZEQUO 6600RE (PN36241E)**

10/100/1000T ×24 (20 +4 combo)
SFP × 4 (4combo)
SFP+/SFP ×4
Stacking ports ×2

## Key Features

**Original**

**・Boot from a configuration file saved on an SD card**

**・IP address Easy Setup**

The IP addresses for Panasonic cameras and switches can be set up together, through a single configuration screen.

**・Loop detection breaking and History Functions**

If a loop is detected, the relevant ports are shut down to prevent disruption from looped connections. LEDs indicate ports for which loops have occurred within the past 3 days.

### ・Spanning Tree

- ✓ IEEE 802.1D
  Spanning Tree Protocol,
  Rapid Spanning Tree Protocol
- ✓ IEEE 802.1Q
  Multiple Spanning Tree Protocol

### ・VLAN

- ✓ IEEE802.1Q
- ✓ Private VLAN
- ✓ Guest VLAN
- ✓ MAC-based VLAN
- ✓ Subnet based VLAN
- ✓ Number of VLAN registrations:
  4,094 (including default)
- ✓ Asymmetric VLAN
- ✓ Voice VLAN

### ・Trunking

- ✓ Link Aggregation function
  (LACP/Manual)
- ✓ Up to 48 groups can be created
  (up to 8 ports per group).

### ・Port Monitoring

- ✓ Traffic of the target port can be copied to the specified port and transmitted.
  (Two or more target ports can be specified.)
- ✓ RSPAN

### ・Multicast

- ✓ IGMP Snooping function
  (IGMP v1/v2/v3)
  Maximum group number : 4,096
  Number of Static registrations : 128
- ✓ MLD snooping function
  (MLDv2)
  Maximum group number : 2,048
  Number of Static registrations : 128

### ・QoS

- ✓ IEEE802.1p
  8 levels of Priority Queue
- ✓ Scheduling Method:
  -Strict Priority Queuing
  (SPQ: Strict priority queuing)
  -Weighted Round Robin
  (WRR: Weighted round robin)
  -Weighted Deficit Round Robin
  (WDRR: Weighted Deficit Round Robin)

### ・Authentication Function

- ✓ Web-based authentication
- ✓ IEEE802.1X Port-based authentication
- ✓ Web-based authentication,
  Mac-based authentication
  using IEEE 802.1X
- ✓ Web-based authentication, Dynamic VLAN function
  using IEEE 802.1X
- ✓ Guest VLAN using IEEE 802.1X
  EAP-MD5/TLS/PEAP authentication method

### ・Fan control

- ✓ Automatic adjustment of fan rotation speed according to usage environment

### ・Access Control

- ✓ Access control can be controlled by the following parameters:
  (1) IP address
  (Source or Destination)
  (2) MAC address
  (Source or Destination)
  (3) TCP/UDP port number
  (Source or Destination)
  (4) VLAN ID
  (5) IEEE 802.1p Priority
  (6) DSCP
  (7) Protocol
  (8) ICMP type
  (9) TCP SYN Flag

### ・Ring redundant protocol

- ✓ Redundancy is enabled by ring topology.
  (Up to 8 group can be registered.)

### ・IP interface

- ✓ IP interface : 256 max.
- ✓ Multiple IP addresses :
  256 / Interface

### ・IPv4 routing

- ✓ Static
- ✓ RIP v1/v2
- ✓ OSPF v2 (maximum number of Neighbor : 200, 32 when device is stacking)
- ✓ Policy-based routing

### ・IPv6 routing

- ✓ Static
- ✓ OSPF v3 (maximum number of Neighbor : 32)

### ・Routing table

- ✓ Static : 256 (IPv4) ,128 (IPv6)
- ✓ Dynamic : 12K (IPv4) ,6K (IPv6)

### ・IP forwarding

- ✓ 95 M bps max

### ・VRRP

- ✓ Maximum number of virtual router : 256

### ・Multicast routing

- ✓ IGMPv1/v2/v3
  Maximum group number : 4,096
  Number of Static registrations : 1,024
- ✓ MLD v1/v2
  Maximum group number : 2,048
- ✓ DVMRP v3
  Maximum number of Neighbor : 100
  Routing table size : 4,096
- ✓ PIM Dense mode (IPv4)
  Maximum number of Neighbor : 100
- ✓ PIM Sparse mode (IPv4/v6)
  Maximum number of Neighbor : 100
  Routing table size : 4,096 (IPv4)
  2,048 (IPv6)
- ✓ PIM Sparse-Dense mode (IPv4)
- ✓ PIM-SSM (IPv4)
  Maximum number of multicast forwarding packets : 4,096
  (shared by IPv4/v6)

### ・DHCPv4 server

- ✓ Allocatable IP address : 1,024/pool
- ✓ Max. pool : 10
- ✓ Max. manual binding address : 16

### ・DHCPv6 server

- ✓ Allocatable IP address : 4,096
  (shared by all pools)
- ✓ Max. pool : 16
- ✓ Max. manual binding address : 64

### ・DHCP relay

- ✓ DHCP Option : 60, 61, 82
- ✓ DHCP v6 Option :18,37
- ✓ Supported local relay

### ・Industry-standard CLI

| Product Name (Prodct No.) | 10/100/1000T | SFP | SFP/SFP+ | Stacking Port | Size(H×W×D) | Fan | Operation Temp |
|---|---|---|---|---|---|---|---|
| **ZEQUO 6700RE (PN36243E)** | 4 (4 combo) | 24 | 4 | 2 | 44×440×312mm | Yes | 0-45℃ |
| **ZEQUO 6600RE (PN36241E)** | 24 (20 + 4 combo) | 4 | 4 | 2 | 44×440×312mm | Yes | 0-45℃ |

## Interface

Twisted pair port:
RJ45 connector

Transmitting and receiving network system :
IEEE802.3 10BASE-T
IEEE802.3u 100BASE-TX
IEEE802.3ab 1000BASE-T

SFP/SFP+ extension slot:
SFF-8472
(DMI:Diagnostic Monitoring Interface)

## Switching mode

Packet transfer capability:Non-blocking
Max 14,880pps/port(10Mbps)
Max 148,800pps/port(100Mbps)
Max 1,488,000pps/port(1000Mbps)

MAC Address table :Max 96K entry/unit

Buffer memory: 4M Byte/unit

## Software Specifications

Agent:

Management protocol :
SNMP v1/v2c/v3
(RFC1157,RFC1901,RFC 1908,
RFC 2570, RFC 2575)
TELNET(RFC854)
SSH v2 (RFC4250,RFC4251, RFC4252,
RFC4253,RFC4254)

Data transfer protocol :
TFTP (RFC783)

Supported MIB:
RFC1213-MIB (MIBII) (RFC 1213)
BRIDGE- MIB (RFC 4188)
SNMPv2-MIB (RFC 1907)
RMON-MIB (RFC 2819)
RMON2-MIB (RFC 2021)
EtherLike-MIB (RFC 2665)
MAU-MIB (RFC 4836)
P-BRIDGE- MIB (RFC 4363)
IF-MIB (RFC 2863)
RADIUS-AUTH-CLIENT-MIB (RFC 2618)
MGMD-STD- MIB (RFC 5519)
RIPv2-MIB (RFC 1724)
IP-FORWARD-MIB (RFC 4292)
IPMROUTE-STD-MIB (RFC 2932)
PIM-MIB (RFC 2934)
RADIUS-ACC-CLIENT-MIB (RFC 2620)
DISMAN-PING-MIB (RFC 2925)
DISMAN-TRACEROUTE-MIB (RFC 2925)
OSPF-MIB (RFC 1850)
VRRP-MIB (RFC 2787)
ENTITY-MIB (RFC 2737)
IPV6-MIB (RFC 4293)

System log:
Maximum number to be kept:10,000
System log transfer (IPv4/IPv6)

Others:
Syslog Client
(Transfers system logs to the Syslog server.)
TFTP Client
(Upgrades the software and saves/loads configuration information.)
TELNET Client
DHCP Client
SNTP
LLDP
LLDP-MED
DNS relay
DNS Resolver
DHCP Snooping

## Rated

Power supply:
AC100-240V, 50/60Hz, 2.0A(with a built-in power supply)

## Environmental Conditions

EMC compliance:
CISPR 32 Class A
EN 55022 Class A
AS/NZS CISPR32 Class A
VCCI Class A
EN 61000-3-2, EN 61000-3-3
CISPR 24
EN 55024
IEC 61000-4-2, IEC 61000-4-3,
IEC 61000-4-4, IEC 61000-4-5,
IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11

Safety compliance:
IEC 60950-1
EN 60950-1

Environment compliance:
RoHS compliant

## Operation environment

Temperature: 0 - 45℃
Humidity: 20 - 80%RH (no condensation)

## Optional Accessories

1000BASE-SX SFP Module (PN54021K)
1000BASE-LX SFP Module (PN54023K)

10GBASE-SR SFP+ Module (PN59021)
10GBASE-LR SFP+ Module (PN59023)

RP02-200W Module (70002)
FAN02 Module (PN73002)

Panasonic

Switches Product Information

# ZEQUO 5410DL

PN88162C

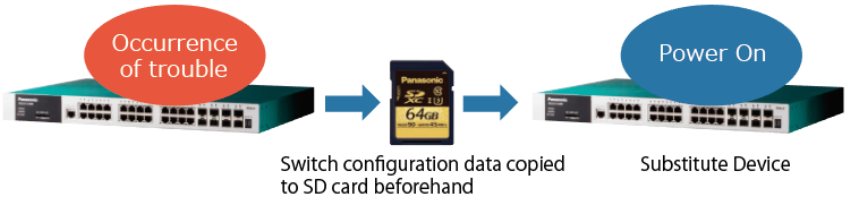
# Optical aggregation switches

ZEQUO 5410DL is Network expansion switch

## Rapid switch failure recovery

-Boot from a configuration file saved on an SD card

Prompt system recovery is possible without technical knowledge of network switch or PC.
There is no need for configuration tools to set up the replacement switch.

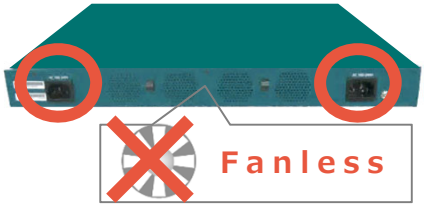



## Network resiliency

-Stacking (up to 2unit) ※

-Redundant Power Supply（fixed）

-Fanless and 50℃



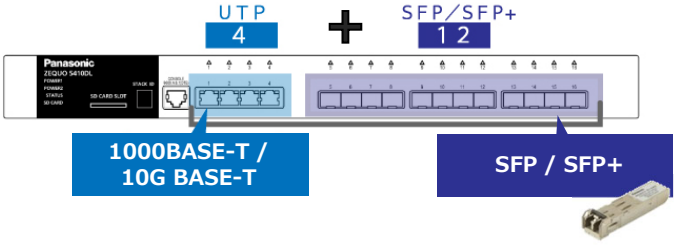

## Manageable

-Industry-standard CLI　Appropriate setting method can be selected according to the environment and demand

## Supports extended and wide area networks

-10Gigabit Network　4 ports of 10GB UTP and 12 ports of SFP + slot can be used simultaneously

-SFP Optical module　12 ports of SFP or SFP+




Port Configuration

| | |
|---|---|
| 100/1000/10GT | X 4 Port |
| SFP+/SFP | X 12 Port |

※When two ZEQUO 5410DL are stacked and the L3 switching function is used, a communication failure occurs.
•When stacking ZEQUO 5410DL, do not turn on L3 switching function at the same time.
•Please use ZEQUO 5410DL in a standalone or a cascade configuration.

## Key Features

**Original**

**・Boot from a configuration file saved on an SD card**

**・IP address Easy Setup**

The IP addresses for Panasonic cameras and switches can be set up together, through a single configuration screen.

**・Loop detection breaking and History Functions**

If a loop is detected, the relevant ports are shut down to prevent disruption from looped connections. LEDs indicate ports for which loops have occurred within the past 3 days.

### ・Spanning Tree

- ✓ IEEE 802.1D
  Spanning Tree Protocol,
  Rapid Spanning Tree Protocol
- ✓ IEEE 802.1s
  Multiple Spanning Tree Protocol

### ・VLAN

- ✓ IEEE802.1Q
- ✓ Private VLAN
- ✓ MAC-based VLAN
- ✓ Subnet based VLAN
- ✓ Protocol-based VLAN
- ✓ Number of VLAN registrations:
  4,079 (including default)

### ・Trunking

- ✓ Link Aggregation function
  (STATIC/LACP)
- ✓ Up to 15 groups can be created
  (up to 8 ports per group).

### ・Port Monitoring

- ✓ Traffic of the target port can be copied to the specified port and transmitted.
- ✓ RSPAN

### ・Multicast

- ✓ IGMP Snooping function
  (IGMP v1/v2/v3)
  Maximum group number :256
- ✓ MLD snooping function
  (MLDv2)
  Maximum group number :256

### ・QoS

- ✓ IEEE802.1p
  8 levels of Priority Queue
- ✓ Scheduling Method:
  -Strict Priority Queuing
  (SPQ:Strict priority queuing)
  -Weighted Round Robin
  (WRR:Weighted round robin)

### ・Authentication Function

- ✓ IEEE802.1X
  Port-based authentication
  Mac-based authentication
- ✓ Mac-based authentication
- ✓ Web-based authentication

### ・Access Control

- ✓ Access control can be controlled by the following parameters:
  (1) IP address
  (Source or Destination)
  (2) MAC address
  (Source or Destination)
  (3) TCP/UDP port number
  (Source or Destination)
  (4) VLAN ID
  (5) IEEE 802.1p Priority
  (6) DSCP
  (7) Protocol
  (8) ICMP type
  (9) TCP SYN Flag

### ・Ring redundant protocol

- ✓ Redundancy is enabled by ring topology.
  (Up to 8 group can be registered.)

### ・IP interface

- ✓ IP interface : 256 max.
- ✓ Multiple IP addresses :
  256 / Interface

### ・IPv4 routing ※

- ✓ Static
- ✓ RIP v2

### ・IPv6 routing ※

- ✓ Static

### ・Routing table ※

- ✓ Static :
  7,224 (IPv4)
  7,248 (IPv6) common with dynamic
- ✓ Dynamic :
  7,360 (common with IPv4,IPv6)

### ・IP forwarding

- ✓ 238 M bps max

### ・VRRP

- ✓ Maximum number of virtual router :
  255

### ・Multicast

- ✓ IGMP snooping(v1/v2/v3 )
  Maximum group number : 256
- ✓ MLD snooping (MLDv2)
  Maximum group number : 256

### ・DHCPv4 server

- ✓ Allocatable IP address : 1,024/pool

### ・DHCP relay

- ✓ DHCP Option : 82

### ・Industry-standard CLI

※When two ZEQUO 5410DL are stacked and the L3 switching function is used, a communication failure occurs.
•When stacking ZEQUO 5410DL, do not turn on L3 switching function at the same time.
•Please use ZEQUO 5410DL in a standalone or a cascade configuration.

## Specifications

| Product Name (Prodct No.) | 100TX/1000T/10T | SFP/SFP+ | Stacking Port | Size(H×W×D) | Fan | Operation Temp |
|---|---|---|---|---|---|---|
| **ZEQUO 5410DL (PN88162C)** | 4 | 12 | 2 SFP combo | 44×440×312mm | Fanless | 0-50℃ |

### Interface

Twisted pair port:
RJ45 connector
Transmitting and receiving network system :
IEEE802.3u 100BASE-TX
IEEE802.3ab 1000BASE-T
IEEE802.3an 10GBASE-T
SFP/SFP+ extension slot:
SFF-8472
(DMI:Diagnostic Monitoring Interface)

### Switching mode

Packet transfer capability:Non-blocking
Max 14,880,000pps/port(10Gbps)
Max 1,488,000pps/port(1000Mbps)
Max 148,800pps/port(100Mbps)
MAC Address table :Max 32K entry/unit
Buffer memory: 3M Byte/unit

### Software Specifications

Agent:
Management protocol :
SNMP v1/v2c/v3
(RFC 1157, RFC 3411, RFC 3412, RFC 3413, RFC 3414, RFC 3415, RFC 3416)
TELNET(RFC 854, RFC 855, RFC 856, RFC 858)
SSH v2 (RFC 4252, RFC 4253, RFC4254, RFC 4716, RFC 4419))
Data transfer protocol :
TFTP (RFC 783, RFC 1350)
Supported MIB:
RFC1213-MIB(MIBⅡ) (RFC 1213)
BRIDGE- MIB (RFC 1493, RFC 4188)
SNMPv2-MIB (RFC 1907)
RMON-MIB (RFC 2819, RFC 3273)
EtherLike-MIB (RFC 2665)
P-BRIDGE- MIB (RFC 4363)
Q-BRIDGE-MIB (RFC 2674)
IF-MIB (RFC 2233, RFC 2863)
RIPv2-MIB (RFC 1724)
IP-FORWARD-MIB (RFC 4292)
DISMAN-PING-MIB (RFC 2925)
DISMAN-TRACEROUTE-MIB (RFC 2925)
VRRP-MIB (RFC 2787)
ENTITY-MIB (RFC 2737)
IPV6-MIB (RFC 2465)
IP MIB (RFC 4293)
TCP MIB (RFC 4022)
UDP MIB (RFC 4113)
Neighborhood Discovery Protocol (NHDP)
LAG MIB (802.3ad)
ICMPv6 MIB (RFC 2466)
Syslog MIB (draft-ietf-syslog-device-mib)

System log:
Maximum number to be kept:1,000
System log transfer (IPv4/IPv6)
Others:
Syslog Client
(Transfers system logs to the Syslog server.)
TFTP Client
(Upgrades the software and saves/loads configuration information.)
TELNET Client
DHCP Client
SNTP
DNS relay
DNS Resolver
DHCP Snooping

### Rated

Power supply:
AC100-240V, 50/60Hz, 1.7A(with a built-in power supply)

### Environmental Conditions

EMC compliance:
VCCI Class A
IEC 61000-4-2(10kV)
IEC61000-4-3 Level2
IEC61000-4-4 Level3
IEC61000-4-5 Level4(AC line)
IEC61000-4-6 Level2
IEC61000-4-8 Level4
IEC61000-4-11
Environment compliance:
RoHS compliant

### Operation environment

Temperature: 0 - 50℃
Humidity: 20 - 80%RH (no condensation)

### Optional Accessories

1000BASE-SX SFP Module (PN54021K)
1000BASE-LX SFP Module (PN54023K)

10GBASE-SR SFP+ Module (PN59021)
10GBASE-LR SFP+ Module (PN59023)

※When two ZEQUO 5410DL are stacked and the L3 switching function is used, a communication failure occurs.
•When stacking ZEQUO 5410DL, do not turn on L3 switching function at the same time.
•Please use ZEQUO 5410DL in a standalone or a cascade configuration.

Panasonic

Switches Product Information

# ZEQUO 2300/2310

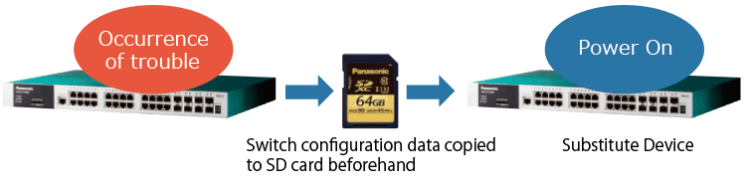
# Gigabit Managed Switches

ZEQUO 2300/2310 are fully managed high-performing Layer 2 Switches.

## Rapid switch failure recovery

-Boot from a configuration file saved on an SD card

Prompt system recovery is possible without technical knowledge of network switch or PC.
There is no need for configuration tools to set up the replacement switch.




## Manageable

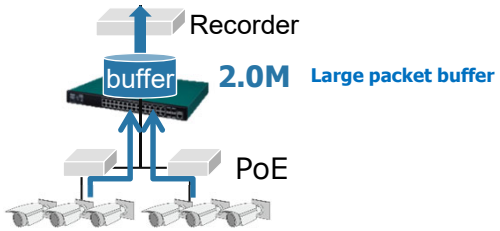
-Industry-standard CLI
-Web-based GUI

Appropriate setting method can be selected according to the environment and demand

## Ideal for Video surveillance environments

-Large buffer 2.0M

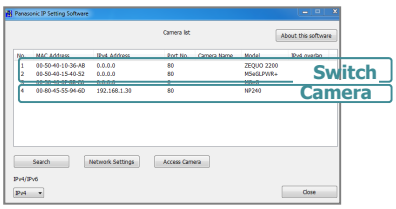
Packet buffer 2.0M Byte/unit. Frames are not dropped even if images from many cameras are aggregated.




-IP address Easy Setup (i-pro & SW )

The IP addresses for both the switches and cameras can be set up simultaneously using Easy IP Address Setup Software.

IP address Easy Setup




**Lineup**

**ZEQUO 2300 (PN26241K)**

10/100/1000T ×28 (24 + 4 combo)
SFP × 4

**ZEQUO 2310 (PN26161K)**

10/100/1000T ×20 (16 + 4 combo)
SFP × 4

# Key Features

**Original**

- **Boot from a configuration file saved on an SD card**
- **IP address Easy Setup**
- **Loop detection breaking and History Functions**

If a loop is detected, the relevant ports are shut down to prevent disruption from looped connections. LEDs indicate ports for which loops have occurred within the past 3 days.

## ・Spanning Tree

- ✓ IEEE 802.1D
  Spanning Tree Protocol,
  Rapid Spanning Tree Protocol
- ✓ IEEE 802.1s
  Multiple Spanning Tree Protocol

## ・VLAN

- ✓ IEEE802.1Q
- ✓ Private VLAN
- ✓ Guest VLAN
- ✓ MAC-based VLAN
- ✓ Subnet based VLAN
- ✓ Number of VLAN registrations: 4,094 (including default)
- ✓ Asymmetric VLAN
- ✓ Voice VLAN
- ✓ Protocol-based VLAN
- ✓ Dynamic VLAN

## ・Port Monitoring

- ✓ Traffic of the target port can be copied to the specified port and transmitted.
  (Two or more target ports can be specified.)
- ✓ RSPAN

## ・Multicast

- ✓ IGMP Snooping（IGMP v1/v2/v3）
  Maximum group number ：1,024
  Number of Static registrations：128
- ✓ MLD snooping（MLDv2）f
  Maximum group number ：1,024
  Number of Static registrations：128

## ・QoS

- ✓ IEEE802.1p
  8 levels of Priority Queue
- ✓ Scheduling Method：
  -Strict Priority Queuing
  （SPQ：Strict priority queuing）
  -Weighted Round Robin
  （WRR：Weighted round robin）
  -Weighted Deficit Round Robin
  (WDRR： Weighted Deficit Round Robin)

## ・Authentication Function

- ✓ IEEE802.1X
  Port-based authentication
- ✓ Mac-based authentication
  using IEEE 802.1X
- ✓ Dynamic VLAN function
  using IEEE 802.1X
- ✓ Guest VLAN using IEEE 802.1X
  （EAP-MD5/TLS/PEAP Authentication method）
- ✓ IEEE802.1X supplicant
- ✓ Force Authorized MAC Address Configuration
- ✓ EAP Packet Forwarding function
  (Enable/disable EAP transmission can be specified for each port.)
- ✓ MAC authentication
- ✓ WEB authentication
- ✓ Triple authentication
  IEEE802.1X MAC-based/MAC/WEB authentication can be simultaneously
- ✓ Step authentication
  authentications can be combined in phases
- ✓ MAC-WEB authentication
- ✓ MAC-802.1X authentication
- ✓ 802.1X-WEB authentication

## ・Access Control

- ✓ Access control can be controlled by the following parameters:
  (1)IPv4 address,IPv6 address
  （Source or Destination）
  (2)MAC address
  （Source or Destination）
  (3)TCP/UDP port number
  （Source or Destination）
  (4)VLAN ID
  (5)IEEE 802.1p Priority
  (6)DSCP
  (7)Protocol
  (8)ICMP type
  (9)TCP SYN Flag

## ・Ring protocol

- ✓ Redundancy is enabled by ring topology.

## ・Temperature Sensor

- ✓ The temperature is built into the switch and sends an SNMP trap when the internal temperatures exceeds the set temperature.

## ・DDM
**(Digital Diagnostic Monitoring)**

- ✓ Since optical signal diagnostics can be performed without an optical power meter, rapid trouble-shooting is possible.

※In order to obtain monitoring information with this device, the connected SFP module must be DMI compatible.

## ・Industry-standard CLI

| Product Name (Prodct No.) | 10/100/1000T | SFP | Size(H×W×D) | Fan | Operation Temp |
|---|---|---|---|---|---|
| **ZEQUO 2300（PN26241K）** | 28 (24 + 4 combo) | 4 | 44×440×312mm | Fanless | 0-50℃ |
| **ZEQUO 2310（PN26161K）** | 20 (16 + 4 combo) | 4 | 44×440×312mm | Fanless | 0-50℃ |

## Interface

Twisted pair port：RJ45 connector
Transmitting and receiving network system ：
IEEE802.3 10BASE-T
IEEE802.3u 100BASE-TX
IEEE802.3ab 1000BASE-T
SFP extension slot：
IEEE802.3z 1000BASE-X
SFF-8472（DMI：Diagnostic Monitoring Interface）

## Switching mode

Packet transfer capability：Non-blocking
Max 14,880pps/port（10Mbps）
Max 148,800pps/port（100Mbps）
Max 1,488,000pps/port（1000Mbps）
MAC Address table ：Max 16K entry/unit
Buffer memory： 2.0M Byte/unit

## Software Specifications

Agent:
Management protocol ：
SNMP v1/v2c/v3
(RFC 1157, RFC 1901, RFC 1908, RFC 3411, RFC 3414)
TELNET（RFC854）
SSH v2（RFC4251,RFC4252,RFC4253, RFC4254）
SNTPv3（RFC 1769）
Data transfer protocol ：
TFTP（RFC 783, RFC 1350）

Supported MIB:
RFC1213-MIB（MIBⅡ）（RFC 1213）（※1）
BRIDGE-MIB（RFC 4188）（※2）
SNMPv2-MIB（RFC 1907）
RMON-MIB（RFC 2819）only etherStatsTable
SNMP-FRAMEWORK-MIB（RFC 2571）
SNMP-MPD-MIB（RFC 2572）
SNMP-NOTIFICATION-MIB（RFC 2573N）
SNMP-TARGET-MIB（RFC 2573T）
SNMP-USER-BASED-SM-MIB（RFC 2574）
SNMP-VIEW-BASED-ACM-MIB（RFC 2575）
SNMP-COMMUNITY-MIB（RFC 2576）
IP-MIB（RFC 4293）（※3）
IF-MIB（RFC 2863）excluding IfMIB
IEEE8021-PAE-MIB excluding dot1xPaeSupplicant
*1 Excluding following item At , ipRouteTable, icmp, egp
*2 Excluding following item dot1dStp, dot1dSr, dot1dStatic
*3 Excluding following item ipDefaultRouterTable, ipv6RouterAdvertTable

System log:
Transfers system logs to the Syslog server（IPv4/IPv6）

Others：
Syslog Client
(Transfers system logs to the Syslog server.)
TFTP Client
(Upgrades the software and saves / loads configuration information.)
TELNET Client
DHCP Client
SNTP
LLDP
LLDP-MED
DNS Resolver
DHCP Snooping
UDLD
DDM
Statistics
Watch Dog Timer

## Rated

Power supply：
AC100-240V, 50/60Hz
(with a built-in power supply)

## Environmental Conditions

EMC compliance:
CISPR 32 Class A
EN 55032 Class A
AS/NZS CISPR32 Class A
VCCI Class A
EN 61000-3-2, EN 61000-3-3
CISPR 24
EN 55024
IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5,
IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Safety compliance:
IEC 62368-1
EN 62368-1
Environment compliance:
RoHS compliant

## Operation environment

Temperature: 0 - 50℃
Humidity: 20 - 80%RH（no condensation）

## Optional Accessories

1000BASE-SX SFP Module(i)（PN54022）
1000BASE-LX SFP Module(i)（PN54024）