

Optical aggregation switches

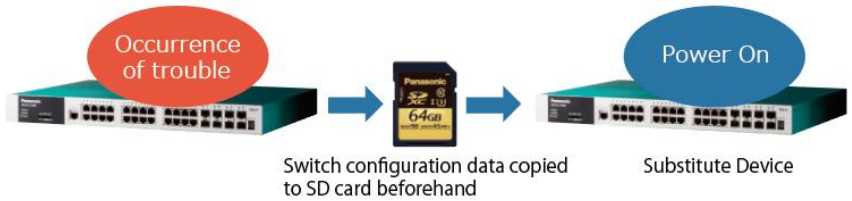
ZEQUO 5410DL is Network expansion switch

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) -50°C



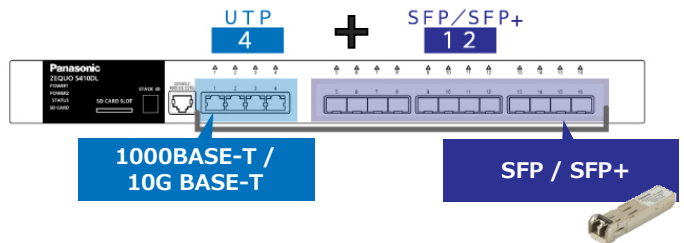
Manageable

-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

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

Product Name (Product 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	Yes	0-50°C

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, RFC 4254, RFC 4716, RFC 4419)

Data transfer protocol :

TFTP (RFC 783, RFC 1350)

Supported MIB:

RFC1213-MIB (MIB II) (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)

IEC 61000-4-3 Level 2

IEC 61000-4-4 Level 3

IEC 61000-4-5 Level 4 (AC line)

IEC 61000-4-6 Level 2

IEC 61000-4-8 Level 4

IEC 61000-4-11

Environment compliance:

RoHS compliant

Operation environment

Temperature: 0 - 50°C

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)