1. Summary
   ZEQUO 6700RE is a Layer 3 Ethernet Switch with management function having 10BASE-T/100BASE-TX/1000BASE-T ports, SFP extension slots, and SFP+ extension slots.

2. Feature

(1) Has wire-speed Layer 3 switching function.

(2) Ports 1 to 24 also have SFP extension slots.
   These ports and the 10/100/1000BASE-T twisted pair cable ports cannot be used simultaneously.

(3) Ports 21 to 24 are 10/100/1000BASE-T ports corresponding to auto negotiation.
   Also their speed and communication mode can be switched by configuration.

(4) Ports 25 to 28 are SFP+ extension slots. They are capable of 10Gbps communications. They can be used as SFP or SFP+ ports.

(5) Ports 27 and 28 are stacking ports.
   Up to four units can be stacked by connecting the ports using optical fiber cable or 40G direct attach cables.

(6) Settings and firmware can be changed and saved by using an SD card.

(7) Equipped with two power ports, power redundancy is feasible. Normally operates even with just the AC power supplied to either one of the power ports.

(8) All twisted pair ports support straight/cross cable by auto sensing function.
   Simply connect devices with straight cables, whether it is a terminal or a network device.

(9) Equipped with energy efficient Ethernet (EEE) conforming to IEEE802.3az (LPI). When there is no data transmission at link up, the energy-saving state automatically starts so that power consumption can be reduced on each port.

(10) Power saving mode detects the connection status automatically and saves power consumption to minimum.

(11) Due to the loop detection/shutoff function, a port where loop has occurred can be automatically shut off to prevent loop failures.

(12) The ports which the loop has generated are displayed via the LED, and the network administrator can specify the ports which the loop has generated after the loop is resolved via the loop history functions.

(13) The Ring Redundant Protocol (RRP) is supported, allowing to make a redundant network via ring topology.

(14) Supports ZEQUO assist Plus. Processes from introduction to maintenance can be performed easily.

3. Rated/Environmental Conditions

3-1. Power supply	AC100-240V, 50/60Hz, 2.5A (with a built-in power supply)	

3-2. Power consumption	When either power port 1, or power port 2 is connected
	  Normally, Max. 52.6 W, Min. 32.7 W
	When both power port 1 and power port 2 are connected
	  Normally, Max. 56.7 W, Min. 35.9 W
	＊Power redundancy is feasible	

3-3. Operating environment	Temperature: 0 - 45℃ Humidity:　　20 - 80%RH (no condensation)	
3-4. Storage environment	Temperature: -20 - 70℃ Humidity:　　10 - 90%RH (no condensation)	
3-5. 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	
3-6. Safety compliance	IEC 62368-1 EN 62368-1	
3-7. Environment compliance	RoHS compliant	

4. Form

4-1. Form and materials/colors	Dimensions　　　　　:44mm(Height)×440mm(Width)×312mm(Depth) 　　　　　　　　　　(Excluding protruding sections) Case material　　　:Main unit: SECC, Front face: PC/ABS, Face plate: PC Color　　　　　　　:Main unit: Green 03, Front face: Silver 01, 　　　　　　　　　　Face plate label: Black 01	
4-2. Mass(Weight)	4,980g(When either power port 1, or power port 2 is connected) 5,600g(When both power port 1 and power port 2 are connected)	

Date issued	Aug 29,2018	Panasonic Electric Works Networks Co., Ltd.
Date revised	Apr 1,2022	

5. Hardware Specifications

5-1. Interface	SFP extension slot 1-24 　SFF-8472(DMI:Diagnostic Monitoring Interface) 　＊Select either of RJ45 or SFP for use(Port21-24) 　　Optional Accessories:　　　　1000BASE-SX SFP Module (PN54021K) 　　　　　　　　　　　　　　　1000BASE-LX SFP Module (PN54023K) Twisted pair port 21-24　　　　　　　　:RJ45 connector 　Transmitting and receiving network system: 　　　　　　　　　　　　　　　IEEE802.3　　　　10BASE-T 　　　　　　　　　　　　　　　IEEE802.3u　　　100BASE-TX 　　　　　　　　　　　　　　　IEEE802.3ab　　1000BASE-T 　　Transmission speed　　　　　　　:10/100/1000Mbps, full/half duplex 　　Compatible cable　　　　　　　　:Twisted pair cable 　　　　　　　　　　　　　　(At least equivalent to EIA/TIA568 category 5e) 　　Maximum transmission distance　　:100m 　　Auto-Negotiation　　　　　　　　:Communication speed and full/half duplex are 　　　　　　　　　　　　　　　　automatically recognized. 　　　　　　　　　　　　　　　　The setting can be fixed to 10Mbps, 100Mbps, 　　　　　　　　　　　　　　　　or 1000Mbps and full duplex or half duplex. 　　Power saving mode　　　　　　　: Detects the connection status automatically 　　　　　　　　　　　　　　　　　and saves power consumption to minimum. SFP+ extension slot 25-28 　SFF-8472(DMI:Diagnostic Monitoring Interface) 　＊Select either of RJ45 or SFP for use 　　Optional Accessories:　　　　1000BASE-SX SFP Module (PN54021K) 　　　　　　　　　　　　　　　1000BASE-LX SFP Module (PN54023K) 　　　　　　　　　　　　　　　10GBASE-SR SFP+ Module (PN59021) 　　　　　　　　　　　　　　　10GBASE-LR SFP+ Module (PN59023) Stack port 29-30 　　Optional Accessories:　　　　40G direct attach cables 1m(OPQSFP-T01) 　　　　　　　　　　　　　　　40G direct attach cables 2m(OPQSFP-T02) FAN Module slot 2slot 　Supported FAN Module model:　　FAN01 Module(PN73002) 　Hot swap:　　　　　　　　　　Supported PSU Module slot 2slot 　Supported PSU Module model:　　RP02-200W Module(70002) 　Hot swap:　　　　　　　　　　Supported
5-2. Switching mode	Switching method　　　　　　　　　:Store and Forward Switching capacity　　　　　　　　　:288Gbps Packet transfer capability　　　　　:Non-blocking 　　　　　　　　　　　　　　　Max 14,880,000pps/port(10Gbps) 　　　　　　　　　　　　　　　Max 1,488,000pps/port(1000Mbps) 　　　　　　　　　　　　　　　Max 148,800pps/port(100Mbps) 　　　　　　　　　　　　　　　Max 14,880pps/port(10Mbps) MAC Address table　　　　　　　　:Max 96K entry/unit Buffer memory　　　　　　　　　　:4M Byte/unit Flow control　　　　　　　　　　　:half-duplex Back pressure 　　　　　　　　　　　　　　　 full-duplex IEEE802.3x Aging timeout　　　　　　　　　　:10 to 1,000,000 sec. (Default: 300 sec.) Jumbo frame　　　　　　　　　　　:13KB

Date issued	Aug 29,2018	Panasonic Electric Works Networks Co., Ltd.
Date revised	Apr 1,2022	

5. Hardware Specifications

5-3. Terminal emulator connection	Console port 　Transmission mode 　Emulation mode 　Communication configuration	:RJ45 connector 1 port :RS-232C(ITU-TS V.24) :VT100 :9,600bps, 8bit, None Parity control, 　Stop bit 1 bit
5-4. Stack	Number of units Bandwidth Stack topology	:Four units max.(stackable with 　ZEQUO6600RE and ZEQUO 6700RE) :80Gbps max. :Chain, Ring
5-5. SD card slot	SD card slot 　Standard 　Size	:1slot :SD/SDHC :128MByte to 32GByte
5-6. LED display	(1) POWER1 LED 　　Green Light : Power is ON. 　　Off : Power is OFF or Internal power supply error. (2) POWER2 LED 　　Green Light : Power is ON. 　　Off : Power is OFF or Internal power supply error. (3) STATUS LED 　　Green Light : The system is normally operating. 　　Orange Light : Starting 　　Orange Blink : Malfunction (Contact the seller.) 　　Off : Power is OFF. (4) SD CARD LED 　　Green Light : SD card inserted 　　Green Blink : Reading/writing data 　　Orange Blink : SD card error 　　Off : No SD card (5) STACK ID LED 　　Indicating "H" and the STACK ID alternately : Master switch 　　Indicating "h" and the STACK ID alternately : Backup master switch 　　Indicating the STACK ID : Slave switch 　＊The following information is also displayed depending upon the device's state. 　　"P" : Power failure 　　"11" : Fan1 failure 　　"12" : Fan2 failure 　　"13" : Fan1 or Fan2 failure 　　"L" : Within 3 days after a loop resolution (5) Port LED 　　LINK/ACT. (Port 1-24) 　　Green Light : Link is established at 1000 Mbps. 　　Green Blink : Transmitting and receiving data at 1000 Mbps. 　　Orange Light : Shuts off due to loop detection and shutoff functions/ 　　　　　　　　storm controls/BPDU guard 　　Orange Blink : Transmitting and receiving just the administration packets 　　Off : No devices are connected. 　　LINK/ACT. (Port 21-24) 　　Green Light : Link is established at 10/100/1000 Mbps. 　　Green Blink : Transmitting and receiving data at 10/100/1000 Mbps. 　　Orange Light : Shuts off due to loop detection and shutoff functions/ 　　　　　　　　storm controls/BPDU guard 　　Orange Blink : Transmitting and receiving just the administration packets 　　Off : No devices are connected.

Date issued	Aug 29,2018	Panasonic Electric Works Networks Co., Ltd.
Date revised	Apr 1,2022	

5. Hardware Specifications

5-6. LED display	LINK/ACT (SFP+ port 25-28)
	  Green Light : Link is established at 1000 Mbps or 10 Gbps.
	  Green Blink : Transmitting and receiving data at 1000 Mbps or 10 Gbps.
	  Orange Light : Shuts off due to loop detection and shutoff functions/storm controls/
	      BPDU guard
	  Orange Blink : Transmitting and receiving just the administration packets
	  Off : No devices are connected.
	
	  LINK/ACT (STACK port 29-30)
	Green Light : Link is established at 40 Gbps.
	Green Blink : Transmitting and receiving data at 40 Gbps.
	Orange Light : Shuts off due to loop detection and shutoff functions/storm controls/
	      BPDU guard
	Orange Blink: Transmitting and receiving just the administration packets
	Off : No devices are connected.

5-7. Cascade connections	Port 21-24 corresponding to the Auto MDI / MDI-X. The ports set as fixed are MDI-X. The factory default is for ports 21 to 24 are Auto MDI / MDI-X.
5-8. FAN	Installed

6. Software Specifications

6-1. Configuration	Control parameters can be set by the following procedures: (1) Configuration from an asynchronous terminal connected to the console port. (2) Configuration from a remote terminal connected via TELNET and SSH.
6-2. Ethernet Switch Control	It is possible to check the control and operation of the Ethernet Switch by ZEQUO assist Plus. Ethernet Switch can be controlled by the following procedures: (1) Control from an asynchronous terminal connected to the console port. (2) Control from a remote terminal using SSH/TELNET and TCP/IP network connection. (3) Control using SNMP Manager The Ethernet Switch operation status can be checked using the following functions. (1) Fan sensor function (2) Internal temperature sensor function (3) Function to display the CPU usage and memory usage (4) SFP module status checking function (DDM: Digital Diagnostic Monitoring)
6-3. Rebooting	The system can be reboot from the software in the following three modes: (1) Warm start (2) Reset to factory default

6-4. Supported 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)

6. Software Specifications

6-5. 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)
6-6. System log	Maximum number to be kept:10,000 System log transfer (IPv4/IPv6)

6-7. Loop detection	Turns on the port LED with a orange light when a loop occurs in the corresponding port.
	At this time, the relevant port automatically shuts down to prevent loop from occurring.
	SNMP trap can be sent to notify the incident to the administrator.
	During loop is occurring, or if loop has occurred within the latest 3 days,
	STATUS LED green blinks to notify this.
	
	· Loop detection port
	        Enabled: Ports 1 to 24 (factory default setting)
	        Disabled: Ports 25 and 30 (factory default setting)
	· Loop detection setting
	        Enabled (factory default setting)
	        Enabled/disabled can be switched by configuring a setting using
	        the console
	· Loop shutoff time
	        60 to 86400 sec. (Factory default setting: 60 sec.)
	        The set time Port LED lights up orange and the port shuts off.
	· Loop shut off mode
	        shutdown mode
	        Blocking mode (factory default setting)

6-8. 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

7. Layer 2 Switching Functions

7-1. Spanning Tree	IEEE 802.1D Spanning Tree Protocol, Rapid Spanning Tree Protocol IEEE 802.1Q Multiple Spanning Tree Protocol
7-2. 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
7-3. Trunking	Link Aggregation function (LACP/Manual) Up to 48 groups can be created (up to 8 ports per group).
7-4. 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
7-5. Multicast	IGMP Snooping(IGMP v1/v2/v3) function 　(Maximum group number :4,096, Number of Static registrations:128) MLD snooping(MLDv2)function 　(Maximum group number :2,048, Number of Static registrations:128)
7-6. QoS	IEEE802.1p 8 levels of Priority Queue supported Scheduling Method： 　Strict Priority Queuing　　　　(SPQ：Strict priority queuing scheduling) 　Weighted Round Robin　(WRR：Weighted round robin scheduling) 　Weighted Deficit Round Robin (WDRR: Weighted Deficit Round Robin scheduling)
7-7. 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)
7-8. Fan control	Automatic adjustment of fan rotation speed according to usage environment
7-9. 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
7-10. Ring protocol	Redundancy is enabled by ring topology. (Up to 8 group can be registered.)

8. Layer 3 Switching Functions
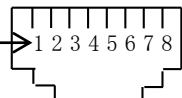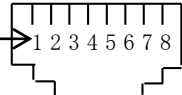
8-1. IP interface	IP interface :256 max. Multiple IP addresses :256 / Interface
8-2. IPv4 routing	Static RIP v1/v2 OSPF v2 (maximum number of Neighbor:200, 32 when device is stacking) Policy-based routing
8-3. IPv6 routing	Static OSPF v3 (maximum number of Neighbor:32)
8-4. Routing table	Static :256 (IPv4),128 (IPv6) Dynamic :12K (IPv4),6K (IPv6)
8-5. IP forwarding	95 M bps max.
8-6. VRRP	Maximum number of virtual router :256

8-7. 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)

8-8. DHCPv4 server	Allocatable IP address :1,024/pool Max. pool :10 Max. manual binding address :16
8-9. DHCPv6 server	Allocatable IP address :4,096 (shared by all pools) Max. pool :16 Max. manual binding address :64
8-10. DHCP relay	DHCP Option :60, 61, 82 DHCP v6 Option :18,37 Supported local relay

Date issued	Aug 29,2018	Panasonic Electric Works Networks Co., Ltd.
Date revised	Apr 1,2022	

9. Web management function

9−1. Software specification	
9−1−1. Enabled browser	Microsoft Internet Explorer 11
9−2. Setting function	
9−2−1. Switching configuration	Administration IP Port (basic, extend, Power saving) Access condition Syslog transmission ID/Password Static ARP table VLAN settings QoS settings Link aggregation Storm control Port monitoring Static multicast address System log Exception handler Watchdog timer RIP Stack IGMP snooping
9−2−2. Time setting	SNTP setting, manual setting
9−3. Monitoring function	
9−3−1. Basic information	System information, Hardware information, Management information [Host name (sysName], System address information
9−3−2. Learning and recording information	FDB table, ARP table, Statistics information, System log
9−4. System management tools	Software upgrade, Reboot, Save current config,file transfer, Ping execution
9−5. Routing setting	OSPF, RIP,Static routing, Policy−based routing, Multicast routing protocol.

10. Connector Pin Arrangement

10−1. Port 21 - 24

Status	Pin No.	1	2	3	6	4	5	7	8
MDI−X	Signal	BI_DB+	BI_DB−	BI_DA+	BI_DA−	BI_DD+	BI_DD−	BI_DC+	BI_DC−
MDI	Signal	BI_DA+	BI_DA−	BI_DB+	BI_DB−	BI_DC+	BI_DC−	BI_DD+	BI_DD−

Pin No. → 1 2 3 4 5 6 7 8

10−2. Console port

Pin No.	Signal	Pin No.	Signal
1	NC	5	GND
2	NC	6	RXD
3	TXD	7	NC
4	GND	8	NC

Pin No. → 1 2 3 4 5 6 7 8

Date issued	Aug 29,2018	Panasonic Electric Works Networks Co., Ltd.
Date revised	Apr 1,2022	

11. Installation Procedures and Accessories

11−1. Installation Procedures	Mounting to rack
11−2. Accessories	(1) Installation Guide :1 (2) Rubber foot :4 (3) Mounting bracket（for 19-inch rack） :2 (4) Screw（for 19-inch rack） :4 (5) Power module（70002 RP02-200W Module） :1（unit mounted） (6) Power module blank panel :1（unit mounted） (7) Fan module（PN73002-MY FAN02 Module） :2（unit mounted） (8) Screw（for fixing the main unit and the mounting bracket） :8 (9) 40G Direct attach cable（OPQSF-T01） (10) Dummy SD card :1（unit mounted） (11) Power cord（BS1363）(*2) :2 ＊ The attached power cord is dedicated for AC 100 − 240 V use.

12. Optional accessories

12−1. 1000BASE-SX
SFP Module
（Model No.：PN54021K-MY）
	Fiber optic port connector type :LC connector（Duplex）
	Standards :IEEE802.3z 1000BASE-SX
	Transmission speed : 1000Mbps, full duplex
	Compatible cable :Fiber cable
	               50/125 μ m Multi Mode Fiber
	               62.5/125 μ m Multi Mode Fiber
	Maximum transmission distance :550 m at 50/125 μ m
	               220 m at 62.5/125 μ m

12−2. 1000BASE-LX
SFP Module
（Model No.：PN54023K-MY）
	Fiber optic port connector type :LC connector（Duplex）
	Standards :IEEE802.3z 1000BASE-LX
	Transmission speed : 1000Mbps, full duplex
	Compatible cable :Fiber cable
	               10/125 μ m Single Mode Fiber
	               50/125 μ m Multi Mode Fiber
	               62.5/125 μ m Multi Mode Fiber
	Maximum transmission distance :10 km when Single Mode Fiber is used
	               550 m when Multi Mode Fiber is used

12−3. 10GBASE-SR
SFP+ Module
（Model No.：PN59021-MY）
	Fiber optic port connector type :LC connector（Duplex）
	Standards :IEEE802.3ae 10GBASE-SR
	Transmission speed :10Gbps full duplex
	Compatible cable :Fiber cable
	               50/125 μ m Multi Mode Fiber
	               62.5/125 μ m Multi Mode Fiber
	Maximum transmission distance :300 m at 50/125 μ m
	               33 m at 62.5/125 μ m

12−4. 10GBASE-LR SFP+ Module （Model No.：PN59023-MY）	Fiber optic port connector type :LC connector（Duplex） Standards :IEEE802.3ae 10GBASE-LR Transmission speed :10Gbps full duplex Compatible cable :Fiber cable 10/125 μ m Single Mode Fiber Maximum transmission distance :10km
12−7. RP02-200W Module （Order Model No.：70002）	AC Power supply module ＊ This AC supply module is dedicated for ZEQUO 6700RE/ZEQUO 6600RE/ ZEQUO 4600RE/ZEQUO 2600RE use.
12−8. FAN02 Module （Model No.：PN73002-MY）	FAN module ＊ This FAN module is dedicated for ZEQUO 6700RE/ZEQUO 6600RE/ ZEQUO 4600RE/ZEQUO 2600RE use.

13. Prohibitions when Using the Product to Guarantee Safety

Denotes that "Death or serious injuries might be sustained".
The manufacturer assumes no responsibility for any problems occurring when the following conditions are not satisfied.
Observe the following items when using the product.

(1) Do not use power supply other than AC 100 – 240 V.
    Deviation could lead to fire, electric shock, and/or equipment failure.

(2) Do not handle this Ethernet Switch and connection cables during a thunderstorm.
    Deviation could lead to electric shock.

(3) Do not disassemble and/or modify this Ethernet Switch.
    Deviation could lead to fire, electric shock, and/or equipment failure.

(4) Do not damage the power cord. Do not bend too tightly, stretch, twist, bundle
    with other cord, pinch, put under a heavy object and/or heat it.
    Damaged power cord could lead to fire, short, and/or electric shock.

(5) Do not unplug nor plug in the power plug with wet hands.
    Deviation could lead to electrical shock, and/or equipment failure.

(6) Do not insert nor drop any foreign objects such as metal or readily combustible
    things into the inside through the openings.
    Deviation could lead to fire, electrical shock, and/or equipment failure.

(7) Do not store or use the Ethernet Switch in places where it might get splashed
    with liquids such as water, in places with a lot of humidity, in places with
    conductive dust, or in places where there are corrosive and combustible gases.
    Deviation could lead to fire, electrical shock, and/or equipment failure.

(8) Do not use the Ethernet Switch in dusty environments such as on floors,
    underneath floors, the backside of ceilings, or boards.
    Do not use the Ethernet Switch in very dusty areas such as on floors, underneath
    floors, the backside of ceilings, or boards. Deviation could lead to fire, electrical shock,
    and/or equipment failure. It is recommended that the Ethernet Switch be operated in
    environments such as the inside of racks where it is difficult for dust to be generated.

(9) Do not store or use the Ethernet Switch in places where it will be exposed to
    direct sunlight or high temperatures.
    The temperature inside will rise, which may cause fire.

(10) Do not store or use the Ethernet Switch in places where there are lots of
    vibrations and impacts, or in unstable areas.
    It might fall, which may cause injuries and/or equipment failure.

(11) Do not put the Ethernet Switch into fire.
    Deviation could lead to explosion and/or fire.

(12) Do not connect any other devices except for 10BASE-T/100BASE-TX/1000BASE-T devices to the twisted pair ports.
    Deviation could lead to equipment failure.

(13) Do not insert any other modules except for our optional SFP module
    (PN54021K/PN54023K) and the SFP+ module (PN59021/PN59023) to the SFP+ extension slots.

(14) Do not insert any other modules except for our optional SFP module (PN54021K/PN54023K), SFP+ module
    (PN59021/PN59023), or 40G direct-attachcable (OP 40G-T01/OP 40G-T02) to the stacking ports (Port29-30).
    Check out our website for the latest information on supported SFP modules.

(15) Do not connect the console ports with any other console cables except for our
    optional PN72001 RJ45-DSub 9-pin console cable.
    Deviation could lead to fire, electrical shock, and/or equipment failure.
    Do not insert nor use any other modules except for our optional FAN02 Module(PN73002) into the fan module slots.
    Deviation could lead to electric shock, malfunction, and/or equipment failure.

Date issued	Aug 29,2018	Panasonic Electric Works Networks Co., Ltd.
Date revised	Apr 1,2022	

13. Prohibitions when Using the Product to Guarantee Safety

(18) Do not insert nor use any other modules except for our optional RP02-200W Module (70002) into the power module slots.
Deviation could lead to electric shock, malfunction, and/or equipment failure.

14. Cautions when Using the Product to Guarantee Safety

(1) Be sure to check the precautions which are printed on the product labels before using.
Deviation could lead to electric shock.

(2) Use the bundled power cord (AC 100 - 240 V specifications).
Deviation could lead to electric shock, malfunction, and/or equipment failure.

(3) Unplug the power cord in case of equipment failure.
Deviation, such as keeping connected for a long time, could lead to fire.

(4) Be sure to connect the ground cable.
Otherwise this might cause electrical shocks, misoperations and malfunctions.
Connect the Ethernet Switch via the supplied power cord to the outlet which is connected to the ground.
If the outlet is not connected to a ground, connect the ground cable to the ground terminal screw.

(5) Connect the power cord firmly to the power port.
Deviation could lead to electric fire, shock, and/or malfunction.

(6) If the STATUS LED is blinking orange, check for the cause via the system log,
since it might be a malfunction if it is not the temperature, loop detection and shutoff, unplug the power plug.
Deviation, such as keeping connected for a long time, could lead to fire.

(7) Handle the Ethernet Switch carefully so that fingers or hands may not be
damaged by twisted pair port, SFP extension slot, Stacking port, console port,
SD card slot, or power cord hook block.

(8) Check whether the optical fiber cable connectors are contaminated with dust, etc.
This might cause the optical signal to not be transmitted normally, and cause
misoperations and malfunctions. If they are contaminated, make sure to clean
them off, then connect them to the optical fiber ports.

(9) This Ethernet Switch is to be periodically serviced in order to maintain its performance.
Please choose a product administrator, and have them be sure to implement
periodic maintenance. When doing maintenance, check the inspection chart that is
posted on our website which has the requisite items listed on it.

(10) When using this Ethernet Switch to design systems, use it after applying
appropriate measures such as setting up redundant configurations.
Communications failures might be generated due to causes such as malfunctions or
misoperations while the Ethernet Switch is being used.

(11) When using this Ethernet Switch for applications which require extremely high
reliability, be careful to expend all possible means to ensure safety and reliability.
This Ethernet Switch was not designed nor manufactured with the intention that it be
used for applications (in use with railways, aviation, and medical care, etc. whereas
the influence rate due to communications failures is extremely high in regard to
systems that directly affect systems and human lives) which require extremely high
reliability.

(12) It is recommended that this Ethernet Switch be replaced about five years after it has been installed.
This may vary depending upon conditions such as utilisation rates and usage
environments, but performance might decrease due to the age-related degradation, etc. of components.

(13) Be careful in regards to environmental restrictions whereby the Ethernet Switch can be used.
Please isolate the business power lines and communications lines. Isolate distribution
lines and other distribution lines, and low current power lines, optical fiber cables,
metallic water conduits, and gas conduits, etc. Noise may be generated in the
communications lines which might cause communications glitches.

Date issued	Aug 29,2018	Panasonic Electric Works Networks Co., Ltd.
Date revised	Apr 1,2022	

14. Basic Instructions for the Use of This Product

(1) For inspection and/or diagnosis, consult the shop.

(2) Use commercial power supply from a wall socket, which is close and easily accessible to this Ethernet Switch.

(3) Unplug the power cord when installing or moving this Ethernet Switch.

(4) Unplug the power cord when cleaning this Ethernet Switch.

(5) Use this Ethernet Switch within the specifications. Deviation could lead to malfunction.

(6) Do not touch the metal terminal of the RJ45 connector, the modular plug of connected twisted pair cable, or the metal terminal of the SFP extension slot. Do not place charged objects in the proximity of them. Static electricity could lead to equipment failure.

(7) Do not put the modular plug of the connected twisted pair cable on objects that can carry static charge, such as carpet. Do not place it in the proximity. Static electricity could lead to equipment failure.

(8) Do not put a strong shock, including dropping, to this Ethernet Switch. Deviation could lead to equipment failure.

(9) Before connecting a console cable to the console port, discharge static electricity, for example by touching metal appliance (do not discharge by touching this Ethernet Switch).

(10) Do not store and/or use this Ethernet Switch in the environment with the characteristics listed below. (Store and/or use this Ethernet Switch in the environment in accordance with the specification.)
- High humidity. Possible spilled liquid (water).
- Dusty. Possible static charge (such as carpet).
- Under direct sunlight.
- Possible condensation. High/low temperature exceeding the specifications environment.
- Strong vibration and/or strong shock.

(11) Please use this Ethernet Switch in place where ambient temperature is from 0 to 45° C.
Failure to meet the above conditions may result in fire, electric shock, breakdown, and/or malfunction. Please take notice because such cases are out of guarantee.
Additionally, do not cover the bent hole of this Ethernet Switch.
Deviation could lead to high internal temperature, equipment failure and/or malfunction.

(12) When stacking Ethernet Switches, leave a minimum of 20 mm space between them.

(13) When connecting the stacks, be sure to use firmware versions that are identical for all of the devices.
Please note that operations are not guaranteed if the firmware versions are different.

(14) Select the appropriate cables and lay them.
Communications might be affected by how the cables are laid, and environmental noise.

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