

ORing

Quick Installation Guide

Introduction

IES-1000 Series are industrial unmanaged Ethernet switches. IES-1000 series support dual redundant power inputs, relay output alarm, and rigid IP-30 housing. In addition, the wide operating temperature range from -40°C to 70°C can satisfy most of operating environment.

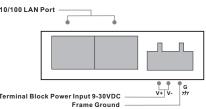
IES-1000 Series can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, there are two different power inputs at terminal block to avoid interruption caused by power down. When the primary DC power input fails, the backup power input will take over immediately to guarantee a non-stop operation.

Features

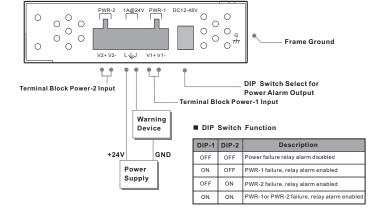
- > Dual redundant DC power inputs at terminal block
- > Support 10/100/1000Base-T(X), 100Base-FX and 1000BaseX ports
- > Very wide operating temperature range from -40 to 70°C
- Rigid IP-30 housing design
- > DIN-Rail and wall mounting enabled

→ Power Connection Guide

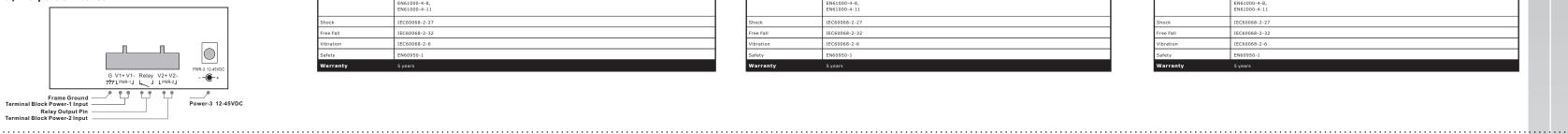
5-port Switches



5-port / 6-port / 8-port Switches



8-port / 10-port Switches



IES-1000 Series

Specifications

8-port /10-port Unmanaged Switches

ORing Switch Model	IES-1080	IES-1062GT	IES-1062FX-MM	IES-1062FX-SS	IES-1062GF-MM	IES-1062GF-SS	IES-1082GI
Physical Ports							
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	8	6	6	6	6	6	8
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX	-	2	-	-	-	-	-
100 Base-FX Multi-mode Port (2KM,1310nm,SC connector)	-	-	2	-	-	-	-
100 Base-FX Single-mode Port (30KM,1310nm,SC connector)	-	-	-	2	-	-	-
1000Base-SX Multi-mode Port (550M,850nm,SC connector)	-	-	-	-	2	-	-
1000Base-LX Single-mode Port (10KM,1310nm,SC connector)	-	-	-	-	-	2	-
1000Base-X SFP Port	-	-	-	-	-	-	2
Technology							
Ethernet Standards	IEEE 802.3at	or 10Base-T for 100Base-TX as b for 1000Base-T for Flow control	nd 100Base-FX				
MAC Table	8192 MAC ad	ldresses					
Processing	Store-and-Fo	orward					
LED Indicators							
Power Indicator	Green: Power	LED x3					
Fault Indicator	Amber: Indica	ate PWR1 or PWR2	failure				
10/100TX RJ45 Port Indicator			for Duplex/Collision				
	- Green for port Link/Act. Amber for Link Green for port Link/Act.						
Fiber Port Indicator		-	Green for port Link//	Act. Amber for Link	Green for port Link/	Act.	
Fiber Port Indicator Fault Contact		-	Green for port Link//	Act. Amber for Link	Green for port Link/	Act.	
	Relay output	to carry capacity		Act. Amber for Link	Green for port Link/	Act.	
Fault Contact	Relay output			Act. Amber for Link	Green for port Link/	Act.	
Fault Contact Relay Power		to carry capacity	of 1A at 24 VDC			Act.	
Fault Contact Relay Power Redundant Input power		to carry capacity		2-45VDC on power ja	ck	Act.	7 Watts
Fault Contact Relay Power Redundant Input power Power consumption(Typ.)	Triple DC inpu 4 Watts	to carry capacity	of 1A at 24 VDC				7 Watts
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection	Triple DC inpu 4 Watts Present	to carry capacity its. 12-48VDC on 7 Watts	of 1A at 24 VDC	2-45VDC on power ja	ck		7 Watts
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection	Triple DC inpu 4 Watts	to carry capacity its. 12-48VDC on 7 Watts	of 1A at 24 VDC	2-45VDC on power ja	ck		7 Watts
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic	Triple DC inpu 4 Watts Present Present on ter	to carry capacity its. 12-48VDC on 7 Watts	of 1A at 24 VDC	2-45VDC on power ja	ck		7 Watts
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure	Triple DC inpu 4 Watts Present Present on ter	to carry capacity of the state	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja	ck		7 Watts
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H)	Triple DC inpu 4 Watts Present Present on ter IP-30 52(W)×106(D	to carry capacity its. 12-48VDC on 7 Watts minal block)x144(H) mm (2.6	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption (Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g)	Triple DC inpu 4 Watts Present Present on ter	to carry capacity of the state	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja	ck		7 Watts
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H)	Triple DC inpu 4 Watts Present Present on ter IP-30 52(W)×106(D	to carry capacity its. 12-48VDC on 7 Watts minal block)x144(H) mm (2.6	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption (Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g)	Triple DC inpu 4 Watts Present Present on ter IP-30 52(W)×106(D	to carry capacity of the standard stand	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption (Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental	Triple DC input 4 Watts Present Present on ter IP-30 52(W)x106(D 666 g	to carry capacity of ts. 12-48VDC on 7 Watts minal block)x144(H) mm (2.4 677 g 40 to 185°F)	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature	Triple DC input 4 Watts Present Present on ter 1P-30 52(W)×106(D 666 g -40 to 85°C (40 to 70°C (to carry capacity of ts. 12-48VDC on 7 Watts minal block)x144(H) mm (2.4 677 g 40 to 185°F)	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature	Triple DC input 4 Watts Present Present on ter 1P-30 52(W)×106(D 666 g -40 to 85°C (40 to 70°C (to carry capacity of the cap	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals	Triple DC inpu 4 Watts Present Present on ter 1P-30 52(W)x106(D 666 g -40 to 85°C (40 to 70°C (5% to 95% No	to carry capacity of the state	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts 8 Watts 05x4.17x5.67 inch.) 680 g	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature	Triple DC inpu 4 Watts Present Present on ter 1P-30 52(W)x106(D 666 g -40 to 85°C (40 to 70°C (5% to 95% No	to carry capacity of the capac	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts 8 Watts 05x4.17x5.67 inch.) 680 g	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMI	Triple DC inpu 4 Watts Present on ter 1P-30 52(W)x106(D 666 g -40 to 85°C (40 to 70°C (5% to 95% No ENS1000-4-2 ENS1000-4-2 ENS1000-4-5 ENS1000-4-6 ENS1000-4-6 ENS1000-4-6	to carry capacity of the capac	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts 8 Watts 05x4.17x5.67 inch.) 680 g	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption (Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMI EMS	Triple DC inpu 4 Watts Present on ter 1P-30 52(W)×106(D 666 g -40 to 85°C(40 to 70°C(- 5% to 95% No FCC Part 15, C ENS1000-4-2 ENS1000-4-2 ENS1000-4-4 ENS1000-4-4 ENS1000-4-6 ENS1000-4-6 ENS1000-4-6 ENS1000-4-6 ENS1000-4-6	to carry capacity to tarry cap	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts 8 Watts 05x4.17x5.67 inch.) 680 g	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMI EMS Shock	Triple DC inpu 4 Watts Present 1P-30 52(W)x106(D 6666 g -40 to 85°C(40 to 70°C (5% to 95% No EN61000-4-2 EN61000-4-3 EN61000-4-3 EN61000-4-1 EN61000-4-1 EN61000-4-1 EN61000-4-1	to carry capacity to tarry capacity tarry capacity capacity capacity tarry capacity	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts 8 Watts 05x4.17x5.67 inch.) 680 g	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	
Fault Contact Relay Power Redundant Input power Power consumption(Typ.) Overload current protection Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) Environmental Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMS Shock Free Fall	Triple DC input 4 Watts Present 1P-30 52(W)x106(D 6666 g -40 to 85°C(40 to 70°C(5% to 95% No EN61000-4-2 EN61000-4-3 EN61000-4-3 EN61000-4-3 EN61000-4-3 EN61000-4-3 EN61000-4-3 EN61000-4-3 EN61000-4-3 EN61000-4-3	to carry capacity to tarry capacity tarry capacity capacity capacity tarry capacity	of 1A at 24 VDC 7-pin terminal block, 1 8 Watts 8 Watts 05x4.17x5.67 inch.) 680 g	2-45VDC on power ja 8 Watts	ck 6 Watts	6 Watts	

• 5-port / 6-port /8-port Unmanaged Switches (Slim Type)

ORing Switch Model	IES-1080A	IES-1050A	IES-1041FX-MM	IES-1041FX-SS	IES-1042FX-MM	IES-1042FX-SS	
Physical Ports							
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	8	5	4	4	4	4	
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX	-	-	-	-	-	-	
100 Base-FX Multimode Port (2KM,1310nm,SC connector)	-	-	1	-	2	-	
100 Base-FX Singlemode Port (30KM,1310nm,SC connector)	-	-	-	1	-	2	
1000Base-SX Multimode Port (550M,850nm,SC connector)	-	-	-	-	-	-	
1000Base-LX Singlemode Port (10KM,1310nm,SC connector)	-	-	-	-	-	-	
1000Base-X SFP Port	-	-	-	-	-	-	
Technology							
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow control						
MAC Table	2048 MAC addre	2048 MAC addresses					
Processing	Store-and-Forw	Store-and-Forward					
LED Indicators							
Power Indicator	Green: Power LE	D x2					
Fault Indicator		Amber: Indicate PWR1 or PWR2 failure					
10/100TX RJ45 Port Indicator	Green for port Link/Act. Amber for Duplex/Collision						
Fiber Port Indicator	- Green for port Link/Act.						
Fault Contact	Dalay autout to		A = 1.24 VDC				
Relay	Relay output to	carry capacity of 1	A dt 24 VDC				
Redundant Input power	Dual DC inputs	12-48VDC on 6-pi	terminal block				
Power consumption(Typ.)	4 Watts	3.5 Watts	5 Watts	5 Watts	7 Watts	7 Watts	
Overload current protection	Present						
Reverse polarity protection	Present						
Physical Characteristic							
Enclosure	IP-30						
Dimension (W x D x H)	26.1(W)x95(D) x 144.3(H) mm (1.30 x 3.74 x 5.68 inch.)						
Weight (g)	391 q	390 g	395 g	I			
		,	333 g	395 g	406 g	406 g	
Environmental			333 g	395 g	406 g	406 g	
Environmental Storage Temperature	-40 to 85°C (-40		535 g	395 g	406 g	406 g	
	-40 to 85°C (-40°	to 185°F)	333 g	395 g	406 g	406 g	
Storage Temperature		to 185°F) to 158°F)	333 g	395 g	406 g	406 g	
Storage Temperature Operating Temperature	-40 to 70°C (-40	to 185°F) to 158°F)	333 g	395 g	406 g	406 g	
Storage Temperature Operating Temperature Operating Humidity	-40 to 70°C (-40	to 185°F) to 158°F)		395 g	406 g	406 g	
Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals	-40 to 70°C (-40	to 185'F) to 158'F) condensing PR (ENS5022) clast SD), SD, TT), urge),		395 g	406 g	406 g	
Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMI	-40 to 70°C (-40 5% to 95% Non	to 185'F) to 158'F) condensing PR (ENS5022) clast SD), SD, TT), urge),		395 g	406 g	406 g	
Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMI EMS	-40 to 70°C (-40 5% to 95% Non FCC Part 15, CIS EN61000-4-2 (E: EN61000-4-3 (R: EN61000-4-5 (S: EN61000-4-6 (E: EN61000-4-8 (E: EN61000-4-8)	to 185'F) to 158'F) condensing PR (ENS5022) clast SD), SD, TT), urge),		395 g	406 g	406 g	
Storage Temperature Operating Temperature Operating Humidity Regulatory Approvals EMI EMS	-40 to 70°C (-40 5% to 95% Non FCC Part 15, CIS EN61000-4-2 (E: EN61000-4-3 (R: EN61000-4-5 (S: EN61000-4-6 (C: EN61000-4-6 (C: EN61000-4-11 IEC60068-2-27	to 185'F) to 158'F) condensing PR (ENS5022) clast SD), SD, TT), urge),		395 g	406 g	406 g	

• 5-port Unmanaged Switches

ORing Switch Model	IES-1050
Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	5
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX	
100 Base-FX Multimode Port (2KM,1310nm,SC connector)	-
100 Base-FX Singlemode Port (30KM,1310nm,SC connector)	-
1000Base-SX Multimode Port (550M,850nm,SC connector)	-
1000Base-LX Singlemode Port (10KM,1310nm,SC connector)	-
1000Base-X SFP Port	-
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow control
MAC Table	2048 MAC addresses
Processing	Store-and-Forward
LED Indicators	
Power / Ready indicator	Green: Power LED x1
Fault Indicator	-
10/100TX RJ45 Port Indicator	Green for port Link/Act. Amber for duplex indicator
Fiber Port Indicator	•
Fault Contact	
Relay	-
Power	
Input power	9~ 30 VDC voltage power input at 3-pin terminal block
Power consumption(Typ.)	3 Watts
Overload current protection	Present
Reverse polarity protection	Present on terminal block
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	88(W) x 102(D) x 24(H)mm (3.46 x 4.0 x 0.94 inch.)
Weight (g)	305 g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-10 to 60°C (14 to 140°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	ENG1000-4-2 (ESD), ENG1000-4-3 (RS), ENG1000-4-4 (EFT), ENG1000-4-5 (Surge), ENG1000-4-5 (CS), ENG1000-4-6, ENG1000-4-6, ENG1000-4-6,
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1

Industrial Unmanaged Switch

IES-1000 Series 1907-2-29-IES1000-1.4 www.oring-networking.com

© PRINTED ON RECYCLED PAPER Quick Installation Guide

INDUSTRIAL

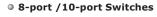
ORing

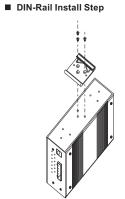
Quick Installation Guide

IES-1000 Series

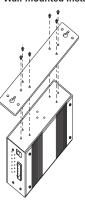
Industrial Unmanaged Switch

Installation





■ Wall-mounted Install Step

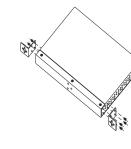




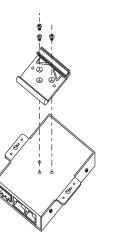
• 5-port / 6-port / 8-port Switches (Slim type) ■ Wall-mounted Install Step







5-port Switches ■ DIN-Rail Install Step



Accessory 1) Wall-mounted kit

4 7-Pin Terminal block

① Dust Cover (RJ-45)

(1) Wall-mounted kit (for Slim Type)



2 45mm DIN-Rail kit

















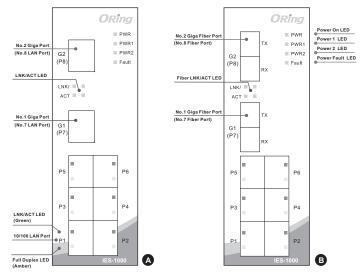
3 Flat Screw (M3 X5)

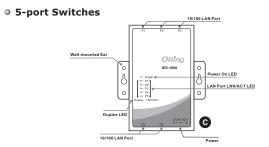
6 6-Pin Terminal block

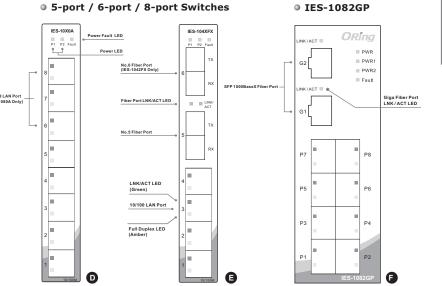
9 Round Screw (M3 X3)

> Front Panel

8-port Switches







Packing list

IES-1000 Series

Model name	Front Panel	Model Description	Accessory
IES-1080			①X1, ②X1, ③X6, ④X1, ⑦X8, ②X1
IES-1062GT			①X1, ②X1, ③X6, ④X1, ①X8, @X1
IES-1062FX-MM			①X1, ②X1, ③X6, ④X1, ①X6, @X1
IES-1062FX-SS		Industrial 8-port unmanaged Ethernet switch with 6x10/100Base-T(X) and 2x100Base-FX, single-mode	①X1, ②X1, ③X6, ④X1, ①X6, @X1
IES-1062GF-MM	3	Industrial 8-port unmanaged Ethernet switch with 6x10/100Base-T(X) and 2x1000Base-SX, multi-mode	①X1, ②X1, ③X6, ④X1, ①X6, @X1
IES-1062GF-SS		Industrial 8-port unmanaged Ethernet switch with 6x10/100Base-T(X) and 2x1000Base-LX, single-mode	①X1, ②X1, ③X6, ④X1, ①X6, @X1
IES-1050		Industrial 5-port unmanaged Ethernet switch with 5x10/100Base-T(X)	②X1, ③X1, ①X5, @X1
IES-1082GP			①X1, ②X1, ③X6, ④X1, ⑦X8, ③X2, ②X1

IES-1000 Series (Slim Type)

Model name	Front Panel	Model Description	Accessory
IES-1050A	O	Industrial 5-port slim type unmanaged Ethernet switch with 5x10/100Base-T(X)	⑥ X 1, ⑦ X 5, ⑨ X 8, ⑩ X 2, ⑪ X 1, ⑫ X 1
IES-1080A	•		; ⊕X 1, @X 1
IES-1041FX-MM		Industrial 5-port slim type unmanaged Ethernet switch with 4x10/100Base-T(X) and 1x100Base-FX, multi-mode	⑥ X 1, ⑦ X 4, ⑨ X 8, ⑩ X 2, ⑪ X 1, ⑫ X 1
IES-1041FX-SS	(3)		⑥ X 1, ⑦ X 4, ⑨ X 8, ⑩ X 2, ⑪ X 1, ⑫ X 1
IES-1042FX-MM	3	multi-mode	⑥X1, ⑦X4, ⑨X8, ⑩X2, ⑪X1, ⑫X1
IES-1042FX-SS		Industrial 6-port slim type unmanaged Ethernet switch with 4x10/100Base-T(X) and 2x100Base-FX, single-mode	⑤X1, ⑦X4, ⑨X8, ⑩X2, ⑪X1, ⑫X1
IES-1042FX-40-SS	(3)	Industrial 6-port slim type unmanaged Ethernet switch with $4x10/100Base-T(X)$ and $2x100Base-FX$, single-mode	:
IES-1042FX-60-SS	(3	Industrial 6-port slim type unmanaged Ethernet switch with $4x10/100Base-T(X)$ and $2x100Base-FX$, single-mode	⊚X1, ⑦X4, ③X8, ⑩X2, ⑪X1, ⑫X1

