EDS-405A/408A Series Quick Installation Guide

Moxa EtherDevice™ Switch

Version 12.2, October 2020

MOXA®

Overview

The Moxa EtherDevice™ EDS-405A/408A series, which includes both 5 and 8-port smart Ethernet switches, is a cost-effective solution for your Ethernet connections. In addition, the built-in smart alarm function helps system maintainers monitor the health of your Ethernet network.

Package Checklist

The Moxa EDS-405A/408A switches are shipped with the following items. If any of these items is missing or damaged, please contact your customer service representative for assistance.

- EDS-405A or EDS-408A Ethernet switch
- RJ45-to-DB9 console port cable
- Protective caps for unused ports
- Panel mounting kit (optional—must order separately)
- Quick installation guide (printed)
- Warranty card

Default Settings

- Default IP address: 192.168.127.253
- Default Subnet Mask: 255.255.255.0
- Default Usernames: admin, user
- Default Password: admin, moxa

NOTE For users who have just updated to firmware v3.10 and above:
If users did not enter a password previously, they will have to enter a new password that has at least four characters. The current default password is 'moxa'.
If users entered a password with three characters or less, they will need to enter a new password that is at least four characters. If users had already added a password that is four characters or more, then no action is required.

EDS-405A/408A Panel Layout (standard)
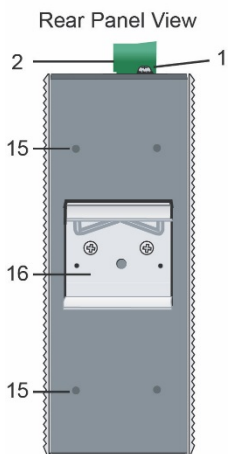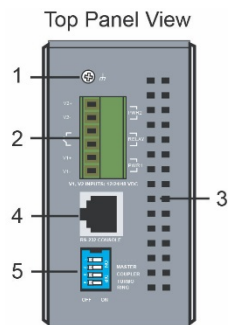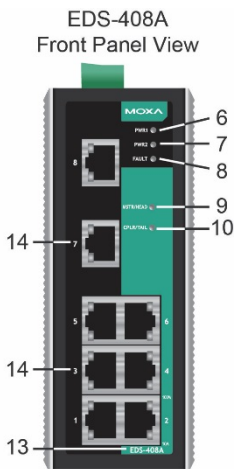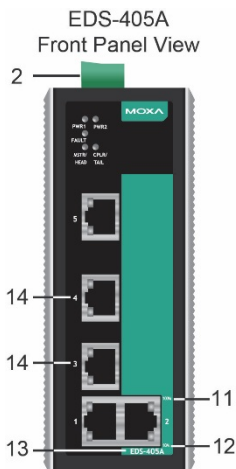
EDS-405A
Front Panel View

EDS-408A
Front Panel View

1. Grounding screw
2. Terminal block for power input PWR1/PWR2 and relay output
3. Heat dissipation vents
4. Console port
5. DIP switches
6. Power input PWR1 LED
7. Power input PWR2 LED
8. Fault LED
9. MSTR/HEAD: LED indicator
10. CPLR/TAIL: LED indicator
11. TP port's 100 Mbps LED
12. TP port's 10 Mbps LED
13. Model Name
14. 10/100BaseT(X) ports
15. Screw hole for wall mounting kit
16. DIN-Rail kit

Top Panel View

Rear Panel View

EDS-405A/408A-MM (SC-type) Panel Layout

EDS-405A-MM-SC
Front Panel View

EDS-408A-MM-SC
Front Panel View
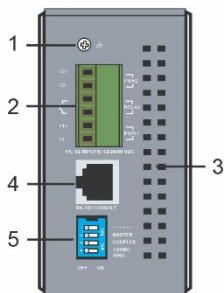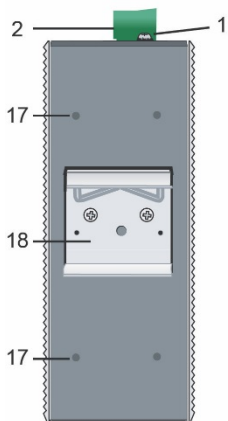
NOTE:
The appearance of the EDS-405A-SS-SC is identical to that of the EDS-405A-MM-SC.
The appearance of the EDS-408A-SS-SC is identical to that of the EDS-408A-MM-SC.

Top Panel View

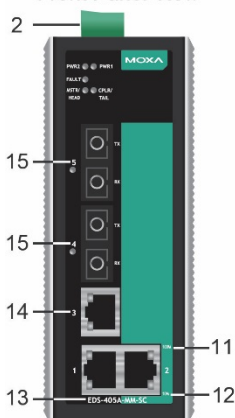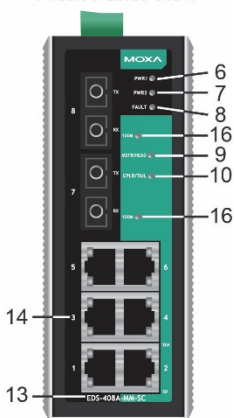Rear Panel View

1. Grounding screw
2. Terminal block for power input PWR1/PWR2 and relay output
3. Heat dissipation vents
4. Console port
5. DIP switches
6. Power input PWR1 LED
7. Power input PWR2 LED
8. Fault LED
9. MSTR/HEAD: LED indicator
10. CPLR/TAIL: LED indicator
11. TP port's 100 Mbps LED
12. TP port's 10 Mbps LED
13. Model Name
14. 10/100BaseT(X) ports
15. 100BaseFX ports
16. FX port's 100 Mbps LEDs
17. Screw hole for wall mounting kit
18. DIN-Rail kit

EDS-405A/408A-MM (ST-type) Panel Layout

EDS-405A-MM-ST
Front Panel View
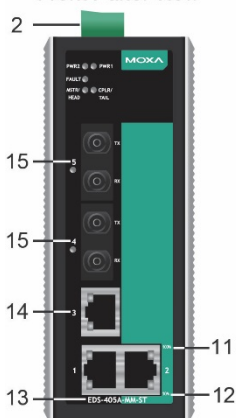
EDS-408A-MM-ST
Front Panel View
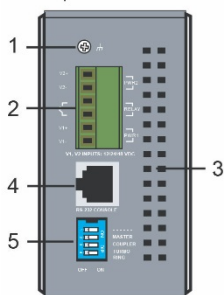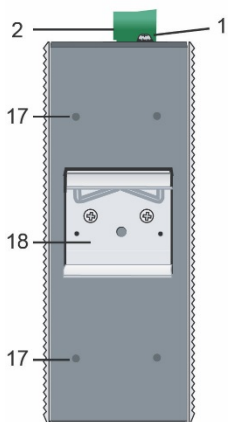
Top Panel View

Rear Panel View

1. Grounding screw
2. Terminal block for power input PWR1/PWR2 and relay output
3. Heat dissipation vents
4. Console port
5. DIP switches
6. Power input PWR1 LED
7. Power input PWR2 LED
8. Fault LED
9. MSTR/HEAD: LED indicator
10. CPLR/TAIL: LED indicator
11. TP port's 100 Mbps LED
12. TP port's 10 Mbps LED
13. Model Name
14. 10/100BaseT(X) ports
15. 100BaseFX ports
16. FX port's 100 Mbps LEDs
17. Screw hole for wall mounting kit
18. DIN-Rail kit

EDS-408A-3M Panel Layout (SC/ST-type)

EDS-408A-3M-SC
Front Panel View
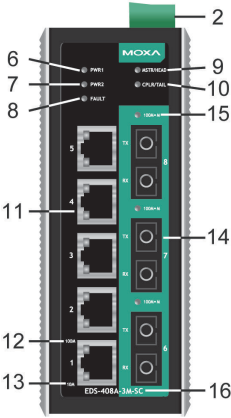
EDS-408A-3M-ST
Front Panel View
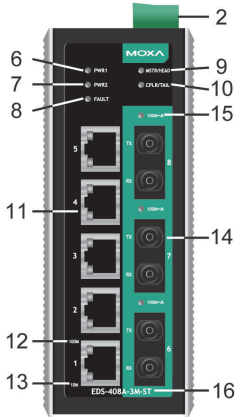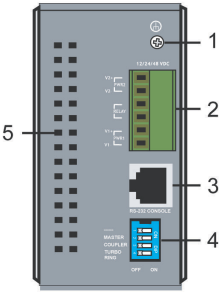
Top Panel View

Rear Panel View
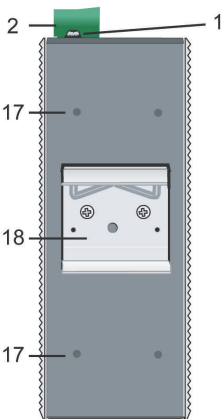
NOTE:
The appearance of the
EDS-408A-3S-SC,
EDS-408A-1M2S-SC, and
EDS-408A-2M1S-SC are identical to
that of the EDS-408A-3M-SC.
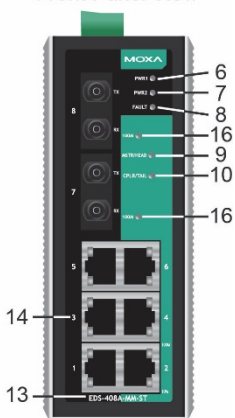
1. Grounding screw
2. Terminal block for power input
   PWR1/PWR2 and relay output
3. Console port
4. DIP switches
5. Heat dissipation vents
6. Power input PWR1 LED
7. Power input PWR2 LED
8. Fault LED
9. MSTR/HEAD: LED indicator
10. CPLR/TAIL: LED indicator
11. 10/100BaseT(X) ports
12. TP port's 100 Mbps LED
13. TP port's 10 Mbps LED
14. 100BaseFX ports
15. 1 FX port's 100Mbps LEDs
    100M-M: multi mode FX port
    100M-S: single mode FX port
16. Model Name
17. Screw hole for wall mounting kit
18. DIN-Rail kit

Mounting Dimensions

Side View

Front View

Rear View

DIN-Rail Kit

Wall Mounting Kit   Unit = mm (inch)
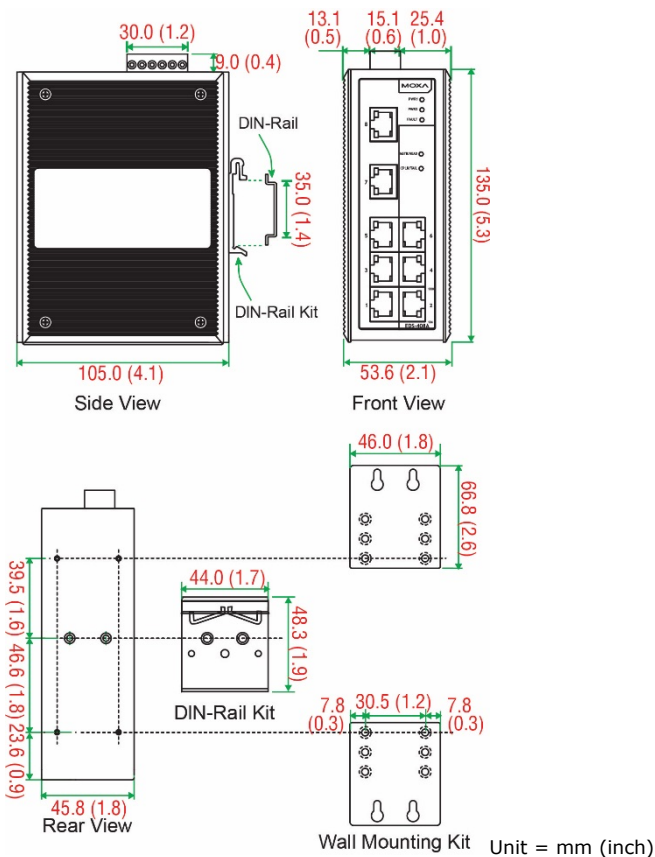
DIN-Rail Mounting

The aluminum DIN-Rail attachment plate should already be fixed to the back panel of the EDS-405A/408A when you take it out of the box. If you need to reattach the DIN-Rail attachment plate, make sure the stiff metal spring is situated towards the top, as shown in the following figures.

STEP 1: Insert the top of the DIN-Rail into the slot just below the stiff metal spring.
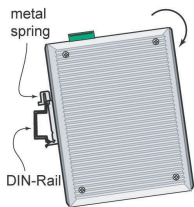
STEP 2: The DIN-Rail attachment unit will snap into place as shown.
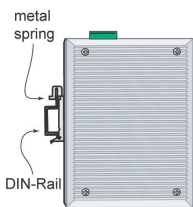
To remove the Moxa EtherDevice switch from the DIN-Rail, simply reverse Steps 1 and 2.

NOTE In order to ensure reliable operations, please make sure the operating temp. of the environment does not exceed the spec. When mounting a EDS-400A switch with other operating units in a cabinet without forced ventilation, minimum spacing of 5cm on both sides and above/below the switch is recommended.

Wall Mounting (optional)

For some applications, you will find it convenient to mount the EDS-405A/408A on the wall, as shown in the following figures.

STEP 1:
Remove the aluminum DIN-Rail attachment plate from the EDS-405A/408A's rear panel, and then attach the wall mount plates with M3 screws, as shown in the diagram at the right.
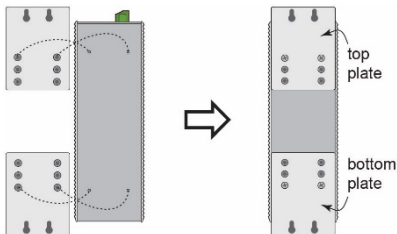
STEP 2:
Mounting the EDS-405A/408A on the wall requires 4 screws. Use the switch, with wall mount plates attached, as a guide to mark the correct locations of the 4 screws. The heads of the screws should be less than 6.0 mm in diameter, and the shafts should be less than 3.5 mm in diameter, as shown in the figure at the right.
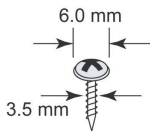
NOTE Before tightening the screws into the wall, make sure the screw head and shank size are suitable by inserting the screw into one of the keyhole-shaped apertures of the wall mounting plates.

Do not screw the screws in completely—leave about 2 mm to allow room for sliding the wall mount panel between the wall and the screws.

STEP 3: Once the screws are fixed in the wall, insert the four screw heads through the large parts of the keyhole-shaped apertures, and then slide the EDS-405A/408A downwards, as indicated. Tighten the four screws for added stability.

ATEX/IECEx Information

1. Certificate number: ATEX: DEMKO 18 ATEX 1978X
   IECEx: IECEx UL 18.0089X (For EDS-408A copper and 2 Fiber model only)
2. Ambient range:
   -40°C ≤ Tamb ≤ 75°C for model with suffix −T only
   -10°C ≤ Tamb ≤ 60°C for model without suffix −T only
3. Certification string:
   ATEX:
   EDS-405A Series: Ex nA nC IIC T4 Gc
   EDS-408A Series (Copper Model EDS-408A(-T)):
   Ex nA nC IIC T4 Gc
   EDS-408A Series (2 Fiber Models EDS-408A-MM/SS(-T)):
   Ex nA nC op is IIC T4 Gc
   IECEx:
   EDS-408A(-T), EDS-408A-MM/SS(-T): Ex nA nC IIC T4 Gc
4. Standards covered:
   EN 60079-0:2012+A11:2013, IEC 60079-0 Ed.6,
   EN 60079-15:2010, IEC 60079-15 Ed.4,
   EN 60079-28:2015, IEC 60079-28 2nd version
5. The conditions of Safe usage for IECEx/ATEX (Zone2):
   - Provisions shall be made to provide the transient protection to be set at a level not exceeding 140% of the peak rated voltage.
   - These devices shall be mounted in a suitable tool-accessible ATEX/IECEx Certified enclosure rated to at least IP54 as defined in EN/IEC 60529 and Pollution Degree 2 as defined in EN/IEC 60664-1, and used within their rated electrical and environmental ratings.
6. The conditions of safe usage for other environments
   - These products must be mounted in an IP54 enclosure.
   - Install in an area of pollution degree 2 or less.
   - Use a conductor wire of size 0.2 mm² or greater.
   - Input Terminal Block (JP3, JP4) - Rated 300 V/12 A, solder on the board, mating with plug-half connector suitable for 28-12 AWG (Sol, Str) wire size, torque value 4.5-5.0 lb-in. The plughalf connection has a latching mechanism.
   - Subject devices are to use conductors suitable for ≧95°C and must be used for the Power Supply Terminal.

Wiring Requirements

> ⚠️ **WARNING**
>
> **Safety First!**
>
> Be sure to disconnect the power cord before installing and/or wiring your Moxa EtherDevice Switch.
>
> Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowable for each wire size.
>
> If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

Be sure to read and follow these important guidelines:

- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross, make sure the wires are perpendicular at the intersection point.
  NOTE: Do not run signal or communications wiring and power wiring through the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.
- Use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring that shares similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separate.
- When necessary, you should label the wiring to all devices in the system.

Grounding the EtherDevice Switch

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

> ⚠️ **ATTENTION**
>
> This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel. A 4 mm^2 conductor must be used when connection to the external grounding screw is utilized.

Wiring the Relay Contact

The Relay Contact consists of the two middle contacts of the terminal block on the EDS-405A/408A's top panel. Refer to the next section for detailed instructions on how to connect the wires to the terminal block connector, and how to attach the terminal block connector to the terminal block receptor.

In this section, we explain the meaning of the two contacts used to connect the Alarm Contact.
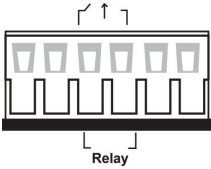
FAULT: The two middle contacts of the 6-contact terminal block connector are used to detect both power faults and port faults. The two wires attached to the fault contacts form an open circuit when:

A relay warning event is triggered.

OR

The EDS-405A/408A is the Master of this Turbo Ring, and the Turbo Ring is broken.

OR

There is a start-up failure.

If none of these three conditions is satisfied, the fault circuit will remain closed.
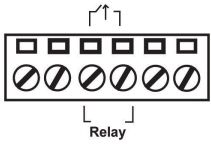
Wiring the Redundant Power Inputs

The top two contacts and the bottom two contacts of the 6-contact terminal block connector on the EDS-405A/408A's top panel are used for the EDS-405A/408A's two DC inputs. Top and front views of one of the terminal block connectors are shown in the following figures:
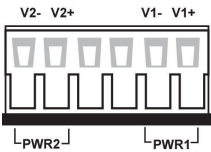
STEP 1: Insert the negative/positive DC wires into the V-/V+ terminals, respectively.

STEP 2: To keep the DC wires from pulling loose, use a small flat-blade screwdriver to tighten the wire-clamp screws on the front of the terminal block connector.
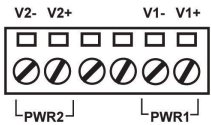
STEP 3: Insert the plastic terminal block connector prongs into the terminal block receptor, which is located on the EDS-405A/408A's top panel.

> ⚠️ **ATTENTION**
>
> Before connecting the EDS-405A/408A to the DC power inputs, make sure the DC power source voltage is stable.

Communication Connections

EDS-408A models have 5, 6, or 8 10/100BaseT(X) Ethernet ports, and 3, 2, or 0 (zero) 100BaseFX (SC/ST-type connector) fiber ports. EDS-405A models have 3 or 5 10/100BaseT(X) Ethernet ports, and 2 or 0 (zero) 100 BaseFX (SC/ST-type connector) fiber ports.

10/100BaseT(X) Ethernet Port Connection

The 10/100BaseT(X) ports located on the EDS's front panel are used to connect to Ethernet-enabled devices.

Next, we show pinouts for both MDI (NIC-type) ports and MDI-X (HUB/Switch-type) ports, and also show cable wiring diagrams for **straight-through and cross-over Ethernet cables.**

10/100Base T(x) RJ45 Pinouts

MDI Port Pinouts

Pin	Signal
1	Tx+
2	Tx-
3	Rx+
6	Rx-

MDI-X Port Pinouts

Pin	Signal
1	Rx+
2	Rx-
3	Tx+
6	Tx-

8-pin RJ45
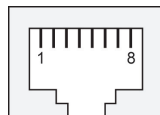
RJ45 (8-pin) to RJ45 (8-pin) Straight-Through Cable Wiring

Switch Port — RJ45 Connector

Straight-Through Cable

NIC Port — RJ45 Connector

RJ45 Plug Pin 1

Cable Wiring

Tx+	3	————	3	Rx+
Tx-	6	————	6	Rx-
Rx+	1	————	1	Tx+
Rx-	2	————	2	Tx-
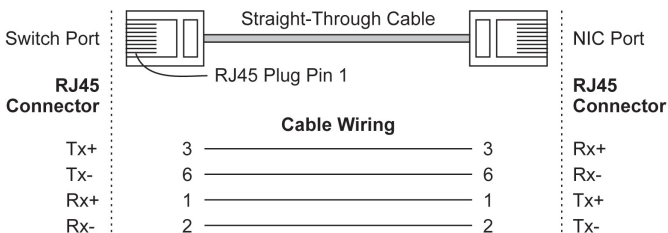
RJ45 (8-pin) to RJ45 (8-pin) Cross-Over Cable Wiring

Switch Port (NIC Port) — RJ45 Connector

Cross-Over Cable

Switch Port (NIC Port) — RJ45 Connector

RJ45 Plug Pin 1

Cable Wiring

(Rx+)	Tx+	3 ———— 1	Rx+	(Tx+)
(Rx-)	Tx-	6 ———— 2	Rx-	(Tx-)
(Tx+)	Rx+	1 ———— 3	Tx+	(Rx+)
(Tx-)	Rx-	2 ———— 6	Tx-	(Rx-)
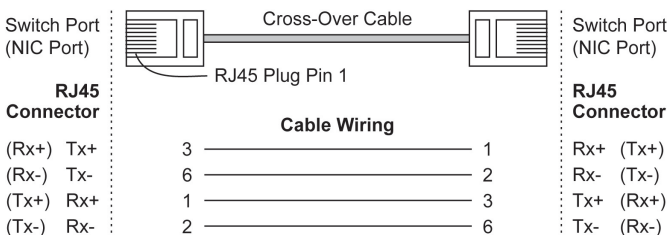
100BaseFX Ethernet Port Connection

The concept behind the SC/ST port and cable is quite straightforward. Suppose you are connecting devices I and II; contrary to electrical signals, optical signals do not require a circuit in order to transmit data. Consequently, one of the optical lines is used to transmit data from device I to device II, and the other optical line is used transmit data from device II to device I, for full-duplex transmission.

Remember to connect the Tx (transmit) port of device I to the Rx (receive) port of device II, and the Rx (receive) port of device I to the Tx (transmit) port of device II. If you make your own cable, we suggest labeling the two sides of the same line with the same letter (A-to-A and B-to-B, as shown below, or A1-to-A2 and B1-to-B2).

SC-Port Pinouts

Tx

Rx
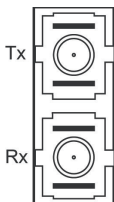
SC-Port to SC-Port Cable Wiring

A

B

A

B

Cable Wiring

A —————————————————— A

B —————————————————— B

ST-Port Pinouts

Tx

Rx
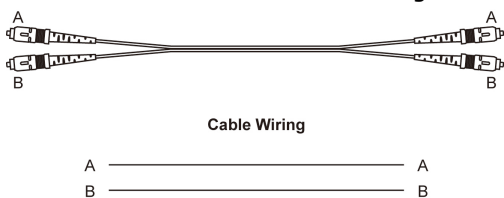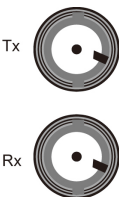
ST-Port to ST-Port Cable Wiring

A

B

A

B

Cable Wiring

A —————————————————— A

B —————————————————— B

> ⚠️ **ATTENTION**
>
> This is a Class 1 Laser/LED product. To avoid causing serious damage to your eyes, do not stare directly into the laser beam.

Redundant Power Inputs

Both power inputs can be connected simultaneously to live DC power sources. If one power source fails, the other live source acts as a backup, and automatically supplies the EDS-405A/408A with power.

Relay Contact

The Moxa EtherDevice switch has one relay contact located on the top panel. For detailed instructions on how to connect the relay contact power wires to the two middle contacts of the 6-contact terminal block connector, see the *Wiring the Relay Contact* section. A typical scenario would be to connect the fault circuit to a warning light located in the control room. The light can be set up to switch on when a fault is detected.
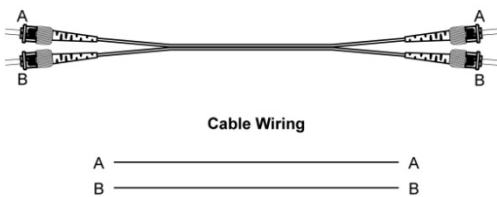
The relay contact has two terminals that form a fault circuit for connecting to an alarm system. The two wires attached to the fault contacts form an open circuit when (1) a relay warning event is triggered, (2) the EDS-405A/408A is the Master of this Turbo Ring, and the Turbo Ring is broken, or (3) there is a start-up failure. If none of these three conditions occur, the fault circuit will be closed.

Turbo Ring DIP Switch Settings

EDS-405A/408A series switches are plug-and-play managed redundant Ethernet switches. The proprietary Turbo Ring protocol was developed by Moxa to provide better network reliability and faster recovery time. Moxa Turbo Ring's recovery time is less than 300 ms (**Turbo Ring**) or 20 ms (**Turbo Ring V2**) —compared to a 3 to 5-minute recovery time for commercial switches—decreasing the possible loss caused by network failures in an industrial setting.

There are 4 Hardware DIP Switches for Turbo Ring on the top panel of the EDS-405A/408A that can be used to set up the Turbo Ring easily within seconds. If you do not want to use a hardware DIP switch to set up Turbo Ring, you can use a web browser, Telnet, or console to disable this function.

NOTE Refer to the *Turbo Ring DIP Switch* section and *Using Communication Redundancy* section in the user's manual for detailed information about the settings and usage of *Turbo Ring* and *Turbo Ring V2*.

EDS-405A/408A Series DIP Switches
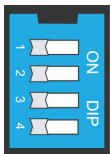
The default setting for each DIP Switch is OFF. The following table explains the effect of setting the DIP Switch to the ON position.

------ MASTER
COUPLER
TURBO RING

"Turbo Ring" DIP Switch Settings

DIP 1	DIP 2	DIP 3	DIP 4
Reserved for future use.	ON: Enables this EDS as the Ring Master.	ON: Enables the default "Ring Coupling" ports.	ON: Activates DIP switches 1, 2, 3 to configure "Turbo Ring" settings.
	OFF: This EDS will not be the Ring Master.	OFF: Do not use this EDS as the ring coupler.	OFF: DIP switches 1, 2, 3 will be disabled.

"Turbo Ring V2" DIP Switch Settings

DIP 1	DIP 2	DIP 3	DIP 4
ON: Enables the default "Ring Coupling (backup)" port.	ON: Enables this EDS as the Ring Master.	ON: Enables the default "Ring Coupling" port.	ON: Activates DIP switches 1, 2, 3 to configure "Turbo Ring V2" settings.
OFF: Enables the default "Ring Coupling (primary)" port.	OFF: This EDS will not be the Ring Master.	OFF: Do not use this EDS as a ring coupler.	OFF: DIP switches 1, 2, 3 will be disabled.

NOTE If you do not enable any of the EDS-405A/408A switches to be the Ring Master, the Turbo Ring protocol will automatically choose the EDS-405A/408A with the smallest MAC address range to be the Ring Master. If you accidentally enable more than one EDS-405A/408A to be the Ring Master, these EDS-405A/408A switches will auto-negotiate to determine which switch will be the Ring Master.

NOTE To switch on the Master or Coupler functions of the DIP switch, you need to enable the Turbo Ring Pole first.

LED Indicators

There are several LEDs on the EDS's front panel. The function of each LED is described in the following table.

LED	Color	State	Description
PWR1	AMBER	On	Power is being supplied to power input PWR1.
		Off	Power is **not** being supplied to power input PWR1.
PWR2	AMBER	On	Power is being supplied to power input PWR2.
		Off	Power is **not** being supplied to power input PWR2.
FAULT	RED	On	1. The signal contact is open. 2. The port has been disabled because the packets exceed the ingress rate limit. 3. The loop connection in a single switch is incorrect. 4. Invalid Ring port connection. 5. A failure during start-up.
		Off	When a relay warning event is not triggered.
MSTR/ HEAD	GREEN	On	1. The switch is set as the Master of the Turbo Ring, or as the Head of the Turbo Chain. 2. Hardware initialization failed (+Stat on and Fault blinking) 3. The switch is set as the Root of RSTP.
		Blinking	The EDS-405A/408A has become the Ring Master of the Turbo Ring, or the Head of the Turbo Chain, after the Turbo Ring or the Turbo Chain is down.
		Off	When the EDS-405A/408A is not the Master of this Turbo Ring or is set as the Member of the Turbo Chain.
CPLR/ TAIL	GREEN	On	When the EDS-405A/408A coupling function is enabled to form a back-up path, or when it's set as the Tail of the Turbo Chain.
		Blinking	When the Turbo Chain is down.
		Off	When the EDS-405A/408A disables the coupling function, or is set as the Member of the Turbo Chain.
10M (TP)	GREEN	On	TP port's 10 Mbps link is active.
		Blinking	Data is being transmitted at 10 Mbps.
		Off	TP Port's 10 Mbps link is inactive.
100M (TP)	GREEN	On	TP port's 100 Mbps link is active.
		Blinking	Data is being transmitted at 100 Mbps.
		Off	TP Port's 100 Mbps link is inactive.
100M (FX)	GREEN	On	FX's 100 Mbps is active.
		Blinking	Data is being transmitted at 100 Mbps.
		Off	FX port's 100 Mbps is inactive.

Auto MDI/MDI-X Connection

The Auto MDI/MDI-X function allows users to connect the EDS-405A/408A's 10/100BaseTX ports to any kind of Ethernet device, without needing to pay attention to the type of Ethernet cable being used for the connection. This means that you can use either a *straight-through* cable or *cross-over* cable to connect the EDS-405A/408A to Ethernet devices.

Specifications

Technology	
Standards	IEEE802.3, 802.3u, 802.3x, 802.1D, 802.1Q, 802.1w, 802.1p
Protocols	IGMP V1/V2 device, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/Client, TFTP, SNTP, SMTP, RARP, RMON, HTTP, Telnet, Syslog, DHCP Option 66/67/82, BootP, LLDP, Modbus TCP, IPv6
MIB	MIB-II, Ethernet-Like MIB, P-BRIDGE MIB, RMON MIB Group 1, 2, 3, 9, Bridge MIB, RSTP MIB
Forwarding and Filtering Rate	148810 pps
Processing Type	Store and Forward
Flow Control	IEEE802.3x flow control, back pressure flow control
Interface	
RJ45 Ports	10/100BaseT(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection
Fiber Ports	100BaseFX ports (SC/ST connector)
Console	RS-232 (RJ45)
LED Indicators	PWR1, PWR2, FAULT, 10/100M (TP port), 100M (Fiber Port), CPLR/TAIL and MSTR/HEAD
Relay Contact	One relay output with current carrying capacity of 1A @ 24 VDC
DIP Switches	Master, Coupler, Turbo Ring, Reserve

Optical Fiber				
			100BaseFX	
			Multi-Mode	**Single-Mode**
Fiber Cable Type		**OM1**	**50/125 µm** **800 MHz*km**	**G.652**
Typical Distance		4 km	5 km	40 km
Wave-length	Typical (nm)		1300	1310
	TX Range (nm)		1260 to 1360	1280 to 1340
	RX Range (nm)		1100 to 1600	1100 to 1600
Optical Power	TX Range (dBm)		-10 to -20	0 to -5
	RX Range (dBm)		-3 to -32	-3 to -34
	Link Budget (dB)		12	29
	Dispersion Penalty (dB)		3	1

Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.

Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).

Power	
Input Voltage	• EDS-405A/408A Series: 12/24/48 VDC, redundant inputs • EDS-408A-3S-SC-48: ±24/±48 VDC (-60 to -19 VDC or 19 to 60 VDC), redundant inputs (The mixing of power polarity system is prohibited.)
Input Current	• EDS-405A Series: 0.594 A/0.286 A/0.154 A @ 12/24/48 V • EDS-408A Series (copper and 2 fiber models): 0.61 A/0.3 A/0.16 A @ 12/24/48 V • EDS-408A Series (3 fiber models): 0.73 A/0.35 A/0.18 A @ 12/24/48 V
Inrush current	• EDS-405A Series: Max. 2.08 A @ 24 VDC (0.1 - 1ms) • EDS-408A 3 Fiber Model: Max. 15.96 A @ 24 VDC (0.1 - 1ms) • EDS-408A Copper and 2Fiber Model: Max. 1.90 A @ 24 VDC (0.1 - 1ms)
Connection	One removable 6-pin terminal block
Overload Current Protection	Present
Reverse Polarity Protection	Present
Physical Characteristics	
Housing	Metal, IP30 protected
Dimensions	53.6 × 135 × 105 mm
Weight	0.65 kg (EDS-405A), 0.89 kg (EDS-408A)
Installation	DIN-Rail, Wall Mounting (optional kit)
Environmental Limits	
Operating Temperature	-10 to 60°C (14 to 140°F); -40 to 75°C (-40 to 167°F) for -T models
Storage Temperature	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5% to 95% (non-condensing)
Regulatory Approvals	
Safety	• EDS-405A/408A: UL 60950-1, UL 508, EN 60950-1 • EDS-408A-3S-SC-48: UL508

Hazardous Location	UL/cUL Class I, Division 2, Groups A, B, C and D,
	ATEX Zone 2, IECEx
	EDS-405A/EDS-408A series (copper and 2 fiber
	models):
	  ANSI/ISA-12.12.01-2015
	  CSA C22.2 NO. 213-15
	  EN 60079-0:2012+A11:2013
	  EN 60079-15:2010
	  EN 60079-28:2015 (for EDS-408A-MM/SS only)
	EDS-408A(-T), EDS-408A-MM/SS(-T):
	  IEC 60079-0, 6th Edition
	  IEC 60079-15, 4th Edition
	  IEC 60079-28, 2nd Edition

EMI	FCC Part 15, CISPR 32 class A

EMS	EN 61000-4-2 (ESD), Level 3
	EN 61000-4-3 (RS), Level 3
	EN 61000-4-4 (EFT), Level 3
	EN 61000-4-5 (Surge), Level 3
	EN 61000-4-6 (CS), Level 3
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6
WARRANTY	5 years

Manufacturer Address:
FI.4, No.135, Lane 235, Baoqiao Rd. Xindian Dist., New Taipei City, Taiwan

> **WARNING**
>
> This equipment is intended to be used in a Restricted Access Location.
> WARNING: Hot Surface! Before touching it, special attention or protection is required.