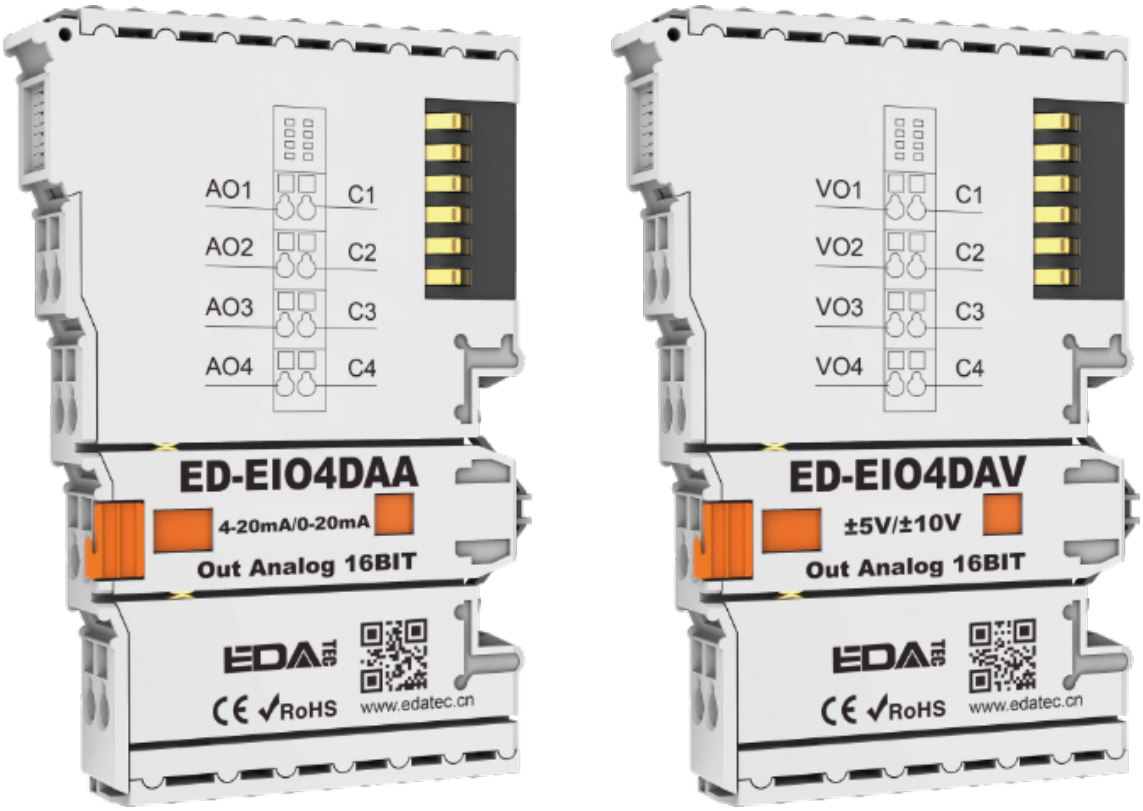


EtherCAT Analog Output Modules

Datasheet

by EDA Technology Co., Ltd

built: 2025-12-22

EtherCAT Analog Output Modules

- 4-channel analog output (current/voltage module)
- Each channel is equipped with the LED for an operation check
- Signal current supports 4~20mA or 0~20mA
- Signal voltage supports -5~5V/0~10V/-10~10V
- 16-bit high-precision analog output
- Plug-in construction, DIN-rail installation
- PT removable terminal block for screwless wiring
- Support cascading up to 32 modules without additional power supply

Specifications

Output (current module)	
Signal Type	Current output
Number of output signal channels	4
Output Current Range	0~20mA/4~20mA
Current Dissipation	285mA
Output Impedance	< 500Ω
Load Type	Resistive load
Resolution	16-bit
Precision	0.02%
Overvoltage Protection	Support
Isolation Voltage	AC500V on field and digital side, no isolation between channels

Output (voltage module)	
Signal Type	Voltage output
	4

Output (voltage module)	
Number of output signal channels	
Output Voltage Range	-5~5V/0~10V/-10~10V
Current Dissipation	230mA
Output Impedance	> 5KΩ
Load Type	Resistive load
Resolution	16-bit
Precision	0.02%
Overvoltage Protection	Support
Isolation Voltage	AC500V on field and digital side, no isolation between channels

Software	
Fieldbus	EtherCAT
EtherCAT Master Software Platform	CODESYS

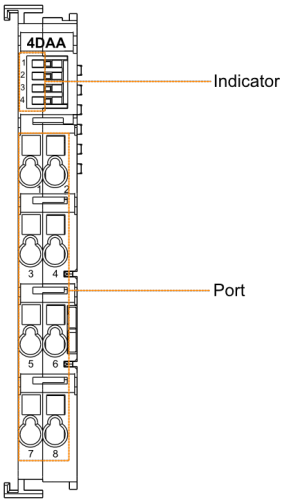
Mechanical Characteristics	
Dimensions	100mm x 67.6mm x 14.8 mm
Weight	About 51g
Wiring Specifications	0.2mm² ~ 1.5mm²
Wiring Method	Screwless
Installation	DIN-rail installation

Environmental & Regulatory	
Operating Temperature	-10℃ ~ 55℃
Storage Temperature	-20℃ ~ 85℃
Ambient Humidity	5% ~ 95% (non-condensing)
Air Pressure	≥ 795 hPa (altitude ≤ 2000 m), compliant with IEC 61131-2
Overvoltage Categories	I

Environmental & Regulatory	
Certifications	CE and RoHS

Interface Definition

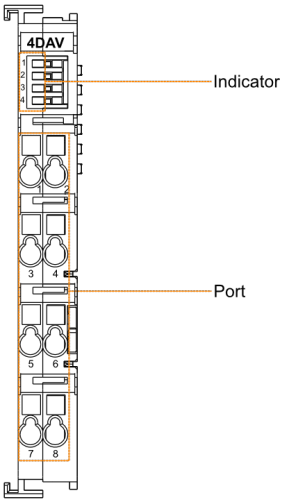
4-channel analog output (current module):



Indicator			
led No.	Output	Color	Description
1~4	AO1/C1~AO4/C4	Green	4 indicators correspond to AO1/C1~AO4/C4, which are independent of each other. The states of indicators are off and blink. • blink: Output a current signal • off: No output signal

Port			
Pin No.	Output	Pin No.	Output
1	AO1	2	C1
3	AO2	4	C2
5	AO3	6	C3
7	AO4	8	C4

4-channel analog output (voltage module):

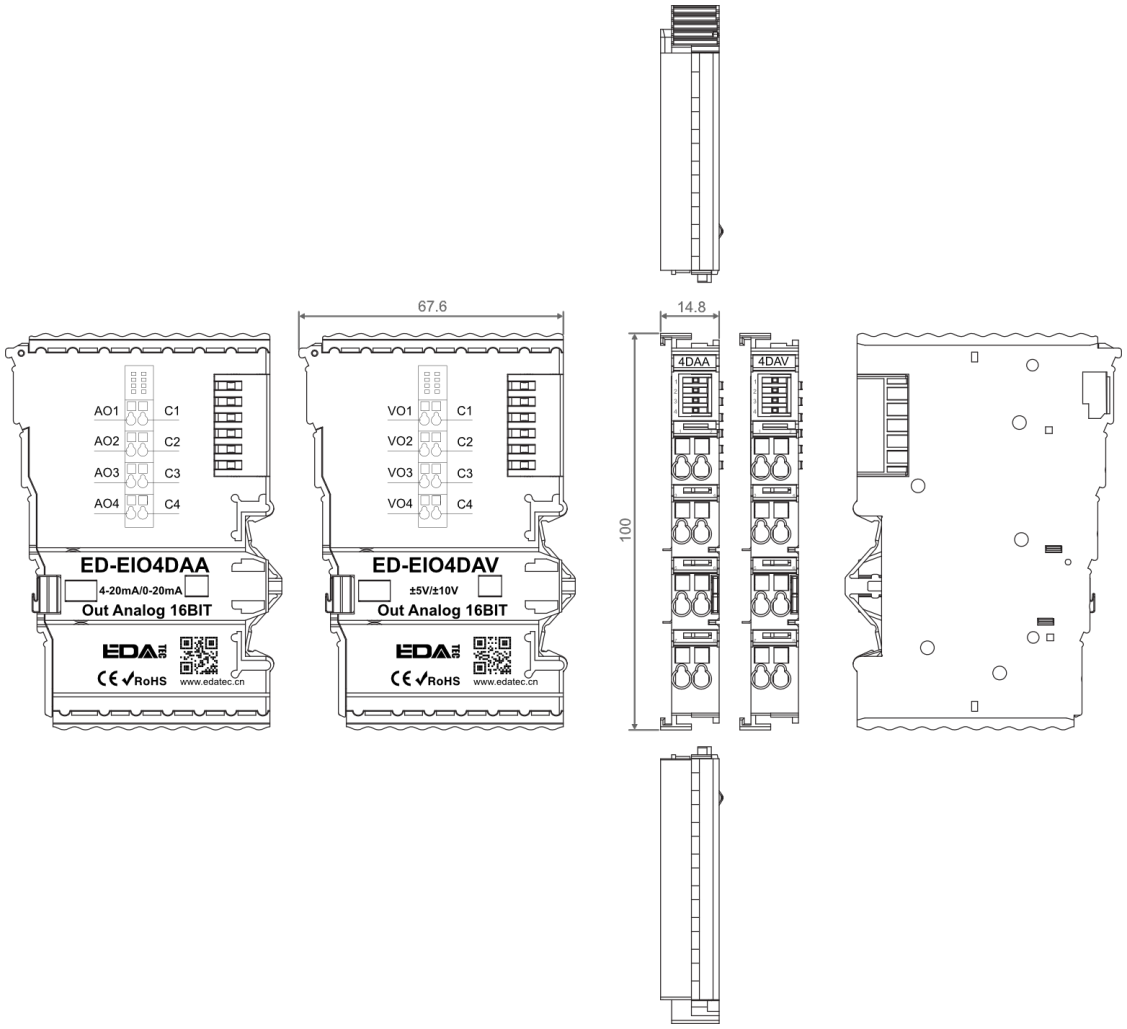


Indicator			
led No.	Output	Color	Description
1~4	VO1/C1~VO4/C4	Green	4 indicators correspond to VO1/C1~VO4/C4, which are independent of each other. The states of indicators are off and blink. • blink: Output a voltage signal • off: No output signal

Port			
Pin No.	Output	Pin No.	Output
1	VO1	2	C1
3	VO2	4	C2
5	VO3	6	C3
7	VO4	8	C4

Dimensions

Unit: mm



Ordering Code

Model	Description
ED-EIO4DAA	4-channel analog output module (current), 4-20mA/0-20mA, configurable
ED-EIO4DAV	4-channel analog output module (voltage), -5 ~ 5V/0 ~ 10V/-10 ~ 10V, configurable

Adapted PLC Unit or EtherCAT Coupler

Model	Description
ED-PLC2010	EtherCAT Master based on CODESYS
ED-EIOBRG-EC	EtherCAT Coupler

Packing List

- 1 x EtherCAT Analog Output Module

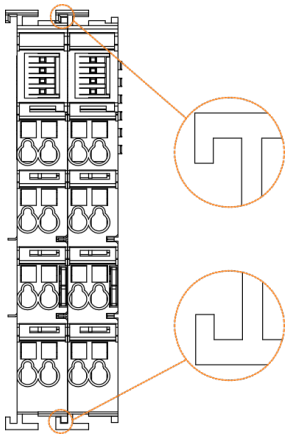
Installation

> TIP
>
> - DIN-rail is not included in the box, the following is intended as an installation illustration only.
> - Before you start installing, please turn off the power to the module.
> - If you encounter a situation where the module cannot be installed, please do not force the installation to avoid damaging the module.

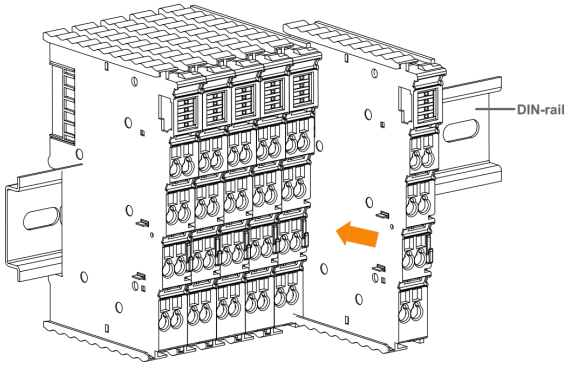
Steps

The following is an example of the installation of an 8-terminal module only.

1. Align the notches in the I/O module.



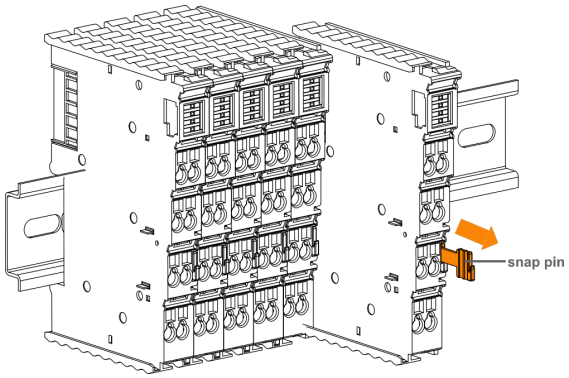
2. Secure the I/O module to the DIN-rail by pushing the I/O module in the direction of the arrow onto the DIN snap pin.



Dismantling

> TIP
>
> - Before you start installing, please turn off the power and disconnect the cable to the module.
> - If you encounter a situation where the module cannot be installed, please do not force the installation to avoid damaging the module.

Steps

The following is an example of the dismantling of an 8-terminal module only.

1. Hold the snap pin of the I/O module by hand and then pull it out in the direction of the arrow to disengage the module from the DIN-rail.