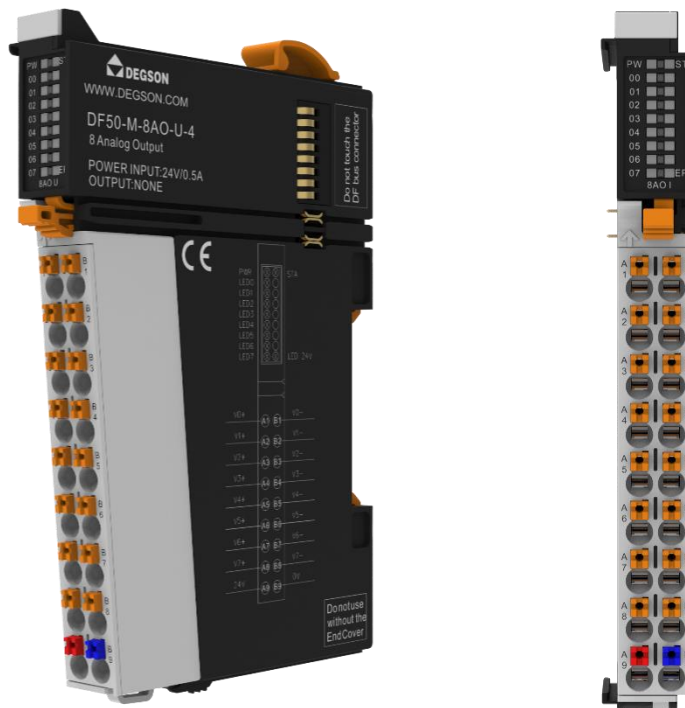


### 3.8 8-channel analog output/voltage type (DF50-M-8AO-U-4)

- The analog output module can output voltage standard signals.
- 8-channel analog output, voltage current type.
- Two LED indicators indicate that the module is operating normally and communication is normal.
- Magnetic isolation between the on-site layer and the system layer.
- Transmit in 16 bit resolution format.
- Protection level IP20.



8-channel analog input/voltage type  
(DF50-M-8AO-U-4)

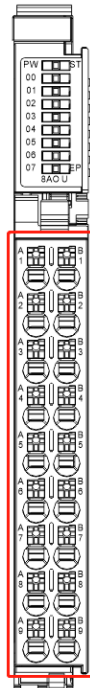
### 3.8.1 Specification parameters

Technical Information	
Product Description	Analog output module, 8 outputs, voltage type
Number of channels	8
type	Analog output
measuring range	voltage
resolving power	16 Bit
Conversion time	60us/channel
Voltage output range	$\pm 10V$ , 0-10V, 2-10V, $\pm 5V$ , 0-5V, 1-5V
Voltage output load	1K $\Omega$
Voltage output accuracy (25 °C)	$\pm 0.1\%$ (full range)
Voltage output accuracy (full temperature range)	$\pm 0.5\%$ (full range)
Voltage output diagnosis	Supports overcurrent and short circuit detection, and supports over temperature protection
Is it isolated	No isolation between interface channels, power supply and interface isolation, interface and bus isolation
Independent channel enable configuration	support
Diagnostic reporting function configuration	support
Conversion Mode Configuration	$\pm 10V$ , 0-10V, 2-10V, $\pm 5V$ , 0-5V, 1-5V
Configuration of output status after shutdown	Clear to zero and maintain current output
Stop mode	Press the fault shutdown mode and no longer refresh
Signal type	Single ended
Isolation method	Magnetic isolation from the on-site layer
data size	8 Byte
Error diagnosis	YES
diagnosis	Status monitoring
temperature coefficient	<30 ppm
working voltage	24V DC+20%/-15%
System feed current	<100mA
Wiring parameters	
Connection technology: input end	PUSH-IN type wiring port
line type	Input
Crimping area of wire	0.14~1.5mm <sup>2</sup> /26~16AWG
Strip length	8~10mm
Installation method	DIN-35 type guide rail
Material parameters	
Colour	Black
Housing material	PC plastic, PA66
Consistency flag	CE
Environmental requirements	
Permissible ambient temperature (during operation)	-25~60°C

Permissible ambient temperature(storage)	-40~85°C
Protection type	IP20
Pollution leve	2. Comply with IEC 61131-2 standard
Working altitude	Without temperature influence:0~2000m
Relative humidity (non condensing)	5~95%RH
Anti vibration	4g, Complies with IEC 60068-2-6 standard
Impact resistance	15g, Complies with IEC 60068-2-27 standard
EMC - Immunity	Complies with EN 61000-6-2 standard
EMC-Radiated Interference	Complies with EN 61000-6-3 standard
Corrosion resistance	Complies with IEC 60068-2-42 and IEC 60068-2-43 standards
Permissible H2S pollutant concentration at 75% relative humidity	10ppm
Permissible SO2 pollutant concentration at 75% relative humidity	25ppm

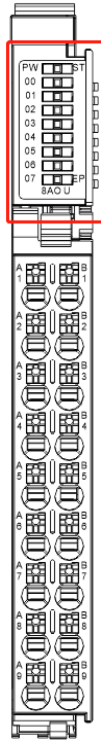
## 3.8.2 Hardware interface

### 3.8.2.1 Definition of wiring port



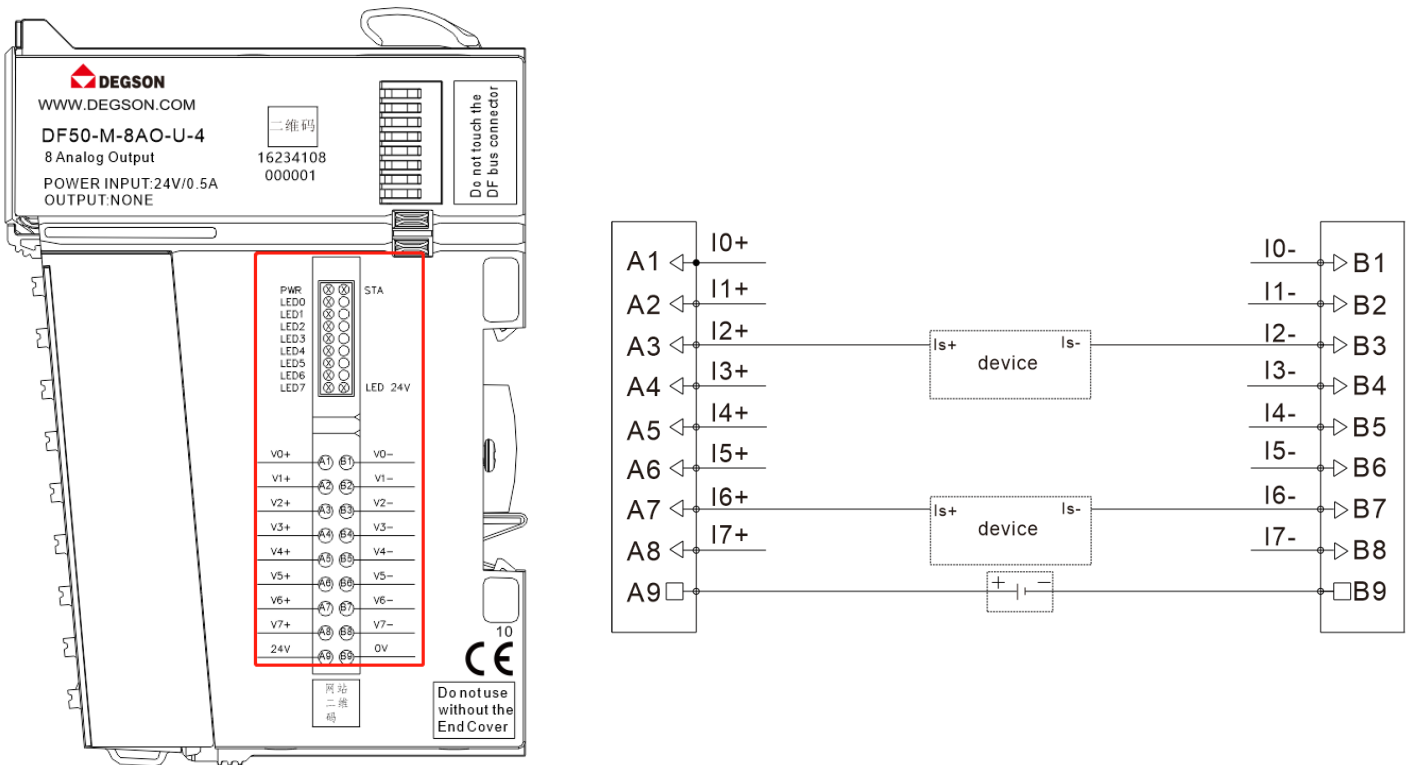
Serial Number	Signal	Serial Number	Signal	Explanatory note
A1	V0+	B1	V0-	Analog voltage output signal 0
A2	V1+	B2	V1-	Analog voltage output signal 1
A3	V2+	B3	V2-	Analog voltage output signal 2
A4	V3+	B4	V3-	Analog voltage output signal 3
A5	V4+	B5	V4-	Analog voltage output signal 4
A6	V5+	B6	V5-	Analog voltage output signal 5
A7	V6+	B7	V6-	Analog voltage output signal 6
A8	V7+	B8	V7-	Analog voltage output signal 7
A9	/	B9	/	/

### 3.8.2.2 Definition of LED indicator lights



LED indicator light	Explanatory note
00~07	On: The analog signal output is valid
	Off: Invalid analog signal output
PW	On: Internal bus power supply is normal
	Off: Abnormal internal bus power supply
ST	Power on stage, green on: module initialization abnormal, green off: module initialization normal
	Operation phase, Green flashing: The internal bus of the module is working normally, green off: The internal bus of the module is working abnormally
EP	On: The power supply to the external interface of the module is normal
	Off: Abnormal power supply to the external interface of the module

### 3.8.2.3 Wiring diagram



Note: A9 and B9 are external power input interfaces.

### 3.8.3 Process Data Definition

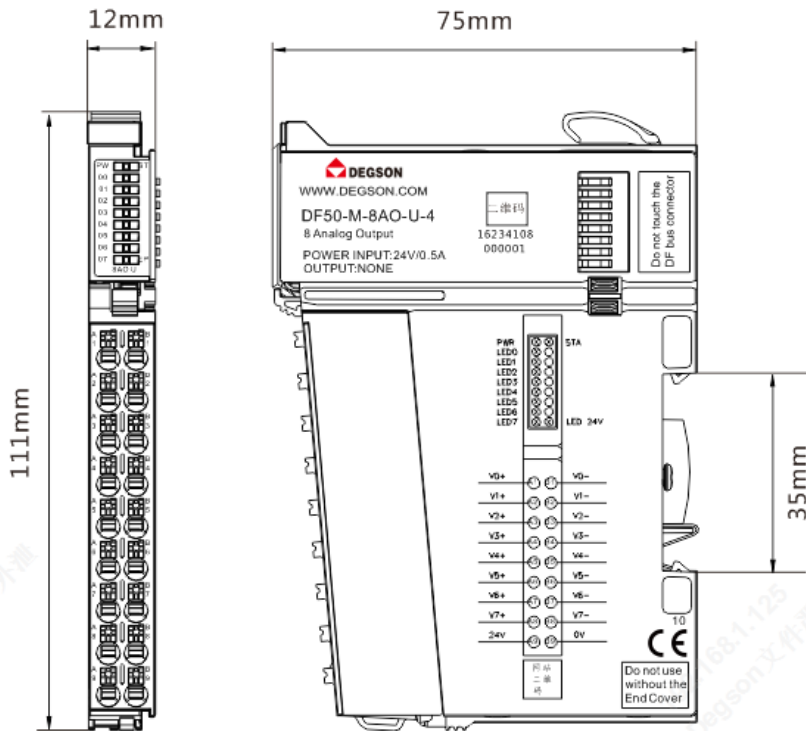
8-channel analog input/voltage type  
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output data								
Bit No	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 0	Analog Output Data(Channel 1)							
Byte 1								
Byte 2	Analog Output Data(Channel 2)							
Byte 3								
Byte 4	Analog Output Data(Channel 3)							
Byte 5								
Byte 6	Analog Output Data(Channel 4)							
Byte 7								

### 3.8.4 Mechanical Installation

Installation dimensions

The installation size information is shown in the following figure.



8-channel analog input/voltage type  
(DF50-M-8AO-U-4)

8-channel analog input/voltage type  
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