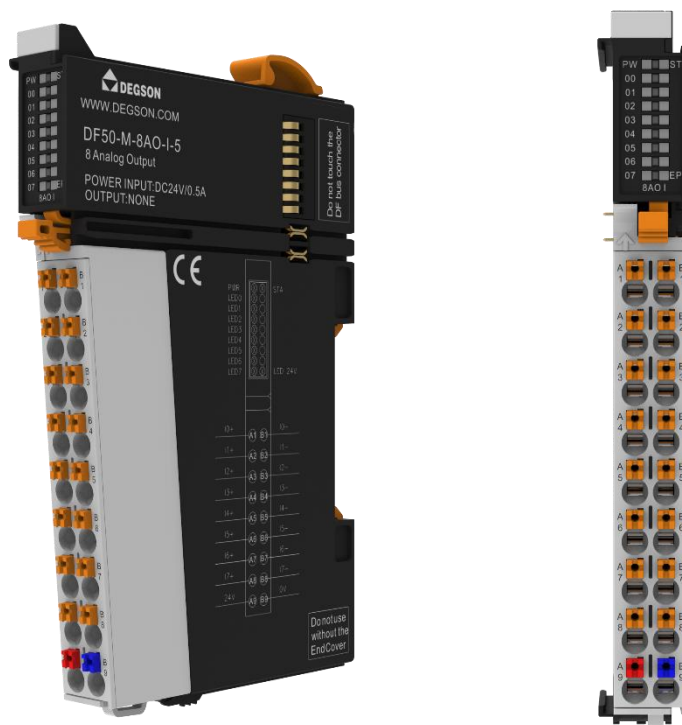


### 3.9 8-channel analog output/current type (DF50-M-8AI-I-5)

- The analog output module can output voltage and current 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 resolution format.
- Protection level IP20.



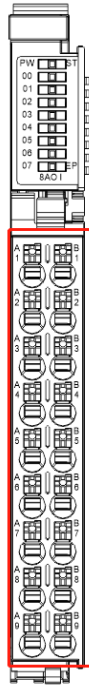
### 3.9.1 Specification parameters

Technical Information	
Product Description	Analog output module, 8 outputs, current type
Number of channels	8
Type	Analog output
measuring range	Voltage and current
resolving power	16 Bit
Conversion time	60us/channel
Current output range	0-20mA, 4-20mA
Current output load	0-600 Ω
Current output accuracy (25 °C)	± 0.1% (full range)
Current output accuracy (full temperature range)	± 0.5% (full range)
Current output diagnosis	Supports overcurrent, short circuit protection, and 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	0-20mA, 4-20mA
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	24VDC +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

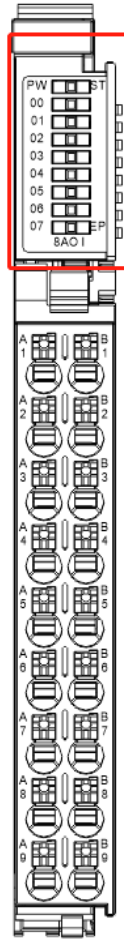
## 3.9.2 Hardware interface

### 3.9.2.1 Definition of wiring port



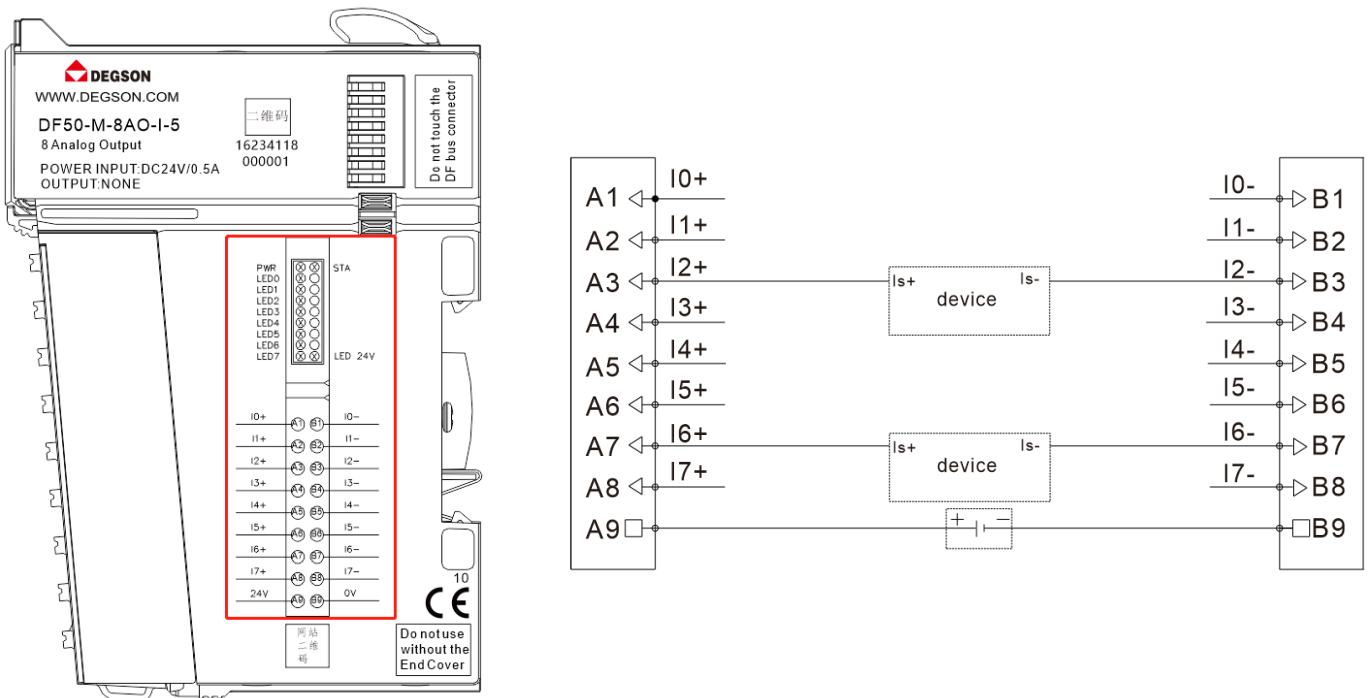
Serial Number	Signal	Serial Number	Signal	Explanatory note
A1	I0+	B1	I0-	Analog current input signal 0
A2	I1+	B2	I1-	Analog current input signal 1
A3	I2+	B3	I2-	Analog current input signal 2
A4	I3+	B4	I3-	Analog current input signal 3
A5	I4+	B5	I4-	Analog current input signal 4
A6	I5+	B6	I5-	Analog current input signal 5
A7	I6+	B7	I6-	Analog current input signal 6
A8	I7+	B8	I7-	Analog current input signal 7
A9	/	B9	/	/

### 3.9.2.2 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

### 3.9.2.3 Wiring diagram



Note: A9 and B9 are external power input interfaces.

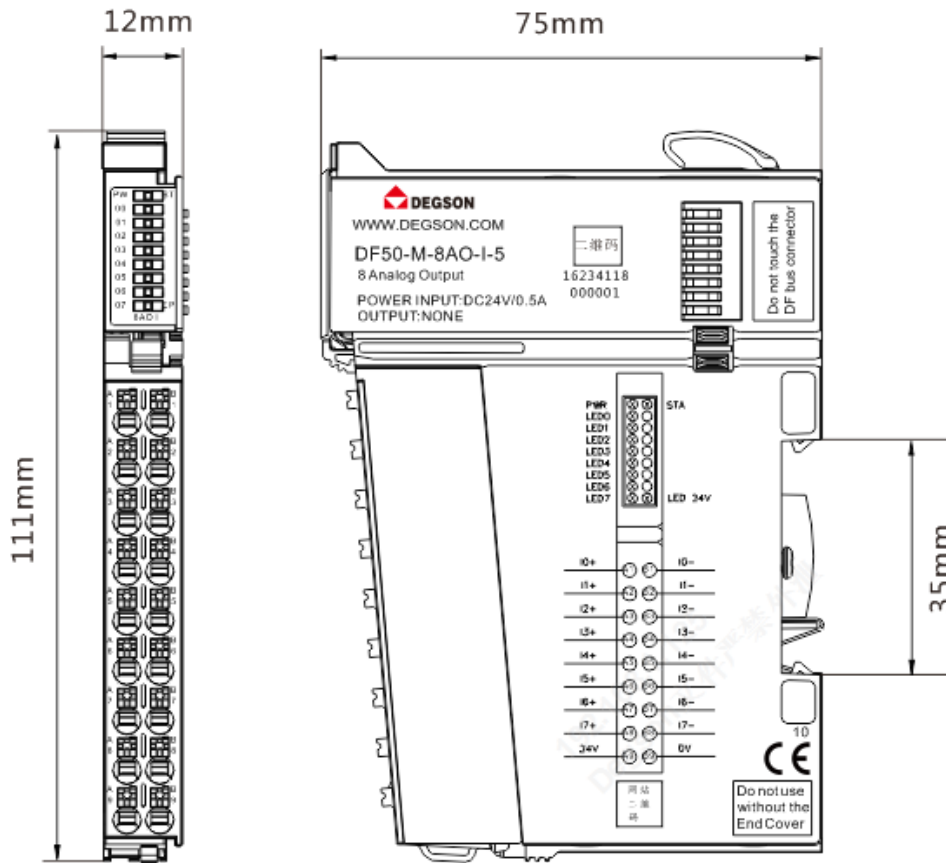
### 3.9.3 Process Data Definition

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								

### 3.9.4 Mechanical Installation

Installation dimensions

The installation size information is shown in the following figure.



8 通道模拟量输入/电流型  
(DF50-M-8AO-I-5)