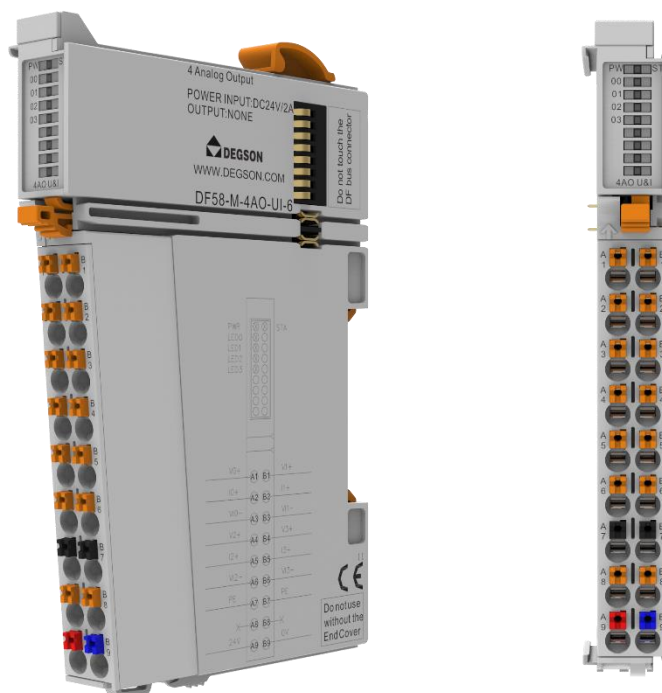


## 4-channel analog output/voltage type/current type (DF58-M-4AO-UI-6)

- The analog output module can receive output voltage and current standard signals.
- 4 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.



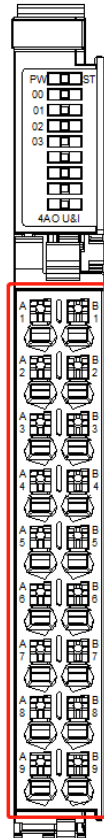
## 1. Specification parameters

Technical Information	
model	DF58-M-4AO-UI-6
type	Analog output
measuring range	Voltage and current
Number of channels	four
resolving power	16 Bit
Conversion time	150us/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)
Current output range	$\pm 20mA$ , 0-20mA, 4-20mA
Current output load	0-600 $\Omega$
Current output accuracy (25 °C)	$\pm 0.1\%$ (full range)
Current output accuracy (full temperature range)	$\pm 0.5\%$ (full range)
Is it isolated	No isolation between interface channels, power supply and interface isolation, interface and bus isolation
Diagnostic reporting function configuration	support
Conversion Mode Configuration	$\pm 10V$ , 0-10V , 2-10V , $\pm 5V$ , 0-5V , 1-5V , $\pm 20mA$ , 0-20mA , 4-20mA
Configuration of output status after shutdown	Clear to zero, maintain current output, output preset values
Output preset value configuration after shutdown	support
Conversion Digital Range Configuration	Default configuration (us/channel 8), supporting $\pm 32000$
Sampling time	4 channels 1ms
Sampling refresh	Asynchronous refresh according to sampling time, does not require synchronous refresh according to bus cycle
Stop mode	Output according to the fault shutdown status mode and preset values, no longer refreshing
Signal type	Differential
Isolation method	Magnetic isolation from the on-site layer
data size	8 Byte
Error diagnosis	YES
Load type	Sensibility, resistance, tolerance
Protective current	20mA

temperature coefficient	<20 ppm
<b>Power parameters</b>	
working voltage	24V DC +20 %/ -15 %
System feed current	<15mA
<b>Wiring parameters</b>	
Connection technology: input/output	PUSH-IN type terminal blocks
Connection type (1)	Input/Output
Crimping area of wire	0.2~1.5mm <sup>2</sup> /26~16AWG
Strip length	8-10mm <sup>2</sup>
Installation method	DIN-35 type guide rail
<b>Material parameters</b>	
colour	Light gray
Shell material	PC plastic, PA66
Consistency flag	CE
<b>Environmental requirements</b>	
Permissible ambient temperature (during operation)	-25-60 °C
Permissible ambient temperature (storage)	-40-85 °C
Protection type	IP20
Pollution level	2. Comply with IEC 61131-2 standard
Working altitude	Temperature without derating: 0-2000m
Installation position	arbitrarily
Relative humidity (non condensing)	5-95% RH
Anti vibration	4g, in accordance with IEC 60068-2-6 standard
Impact resistance	15g, in accordance 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 H <sub>2</sub> S pollutant concentration at 75% relative humidity	10ppm
Permissible SO <sub>2</sub> pollutant concentration at 75% relative humidity	25ppm

## 2. Hardware interface

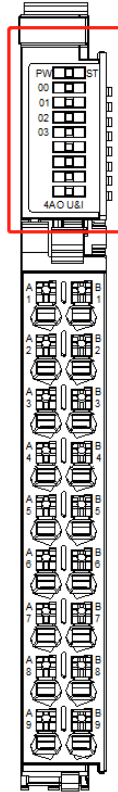
### ● 2.1 Terminal Definition



serial number	signal	note
A1	I0+	Voltage/current output channel 0
A2	I0+	
A3	I0-/I0-	
A4	V2+	Voltage/current output channel 2
A5	I2+	
A6	V2-/I2-	
A7	PE	PE
A8	/	/
A9	Load 24V	Load 24V
serial number	signal	note
B1	V1+	Voltage/current output channel 1
B2	I1+	
B3	V1-/I1-	
B4	V3+	Voltage/current output channel 3
B5	I3+	
B6	V3-/I3-	
B7	PE	PE
B8	/	/

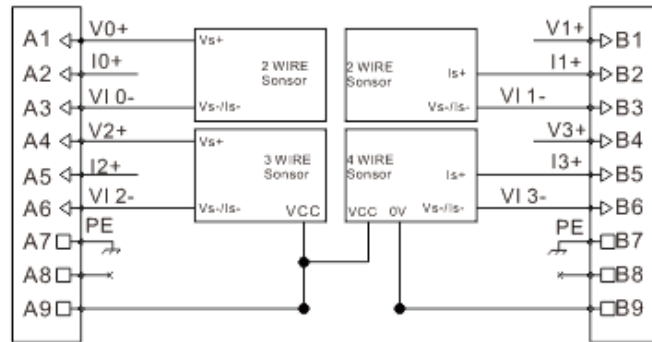
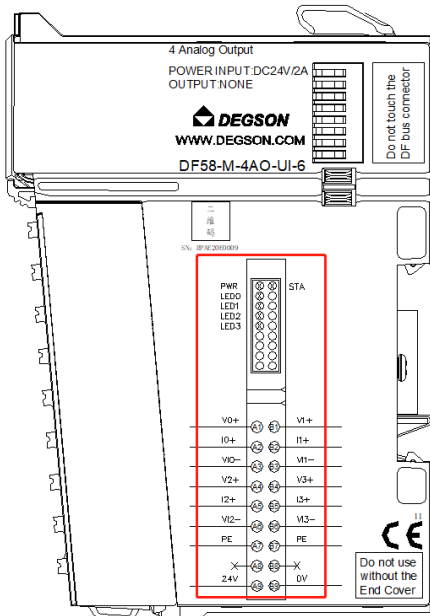
B9	Load 0V	Load 0V
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● 2.2 Definition of LED indicator lights



Pilot lamp	Note
00~03	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 light on: module initialization abnormal, green light off: module initialization normal
	Operation phase: green light flashing: module internal bus working normally, green light off: module internal bus working abnormally

## ● 2.3 Wiring diagram



## 3. Process Data Definition

### DF58-M-4AO-UI-6 Module Process Data Definition

输出数据								
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								

## 4. Mechanical Installation

### ● 4.1 Installation dimensions

The installation dimension information is shown in the following figure, in millimeters:

