

## Analog Output Modules

**R60DA4**  
4-channel (voltage or current)

**R60DAV8**  
8-channel (voltage)

**R60DAI8**  
8-channel (current)

**R60DA8-G**  
8-channel (voltage or current),  
channel isolated

**R60DA16-G**  
16-channel (voltage or current),  
channel isolated

**R60DAH4**  
4-channel (voltage or current)

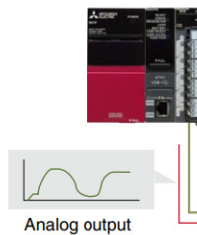
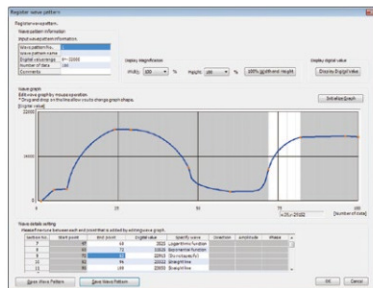
**RY40PT5B-AS**  
16 points 24 V DC, 0.5 A  
SIL2 analog control output

MELSEC iQ-R Series analog output modules reliably deliver accurate analog values to points where high-resolution digital inputs are required. A variety of modules (voltage, current, or mixed) are available to cover a wide range of application requirements, such as high-speed drive control or variable-speed control of the pressure applied to materials being fed into some kind of forming mechanism.

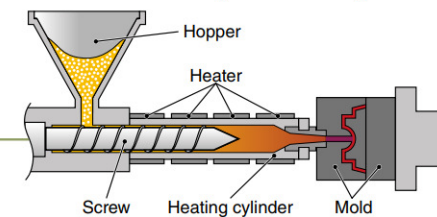
### Faster, smoother predefined wave signal output

The analog output module enables pre-registration of waveforms easily using MELSOFT GX Works3, realizing a smoother continuous output that closely matches the precision required for the application, such as torque control for a press or injection molding machine. Registering the waveform in the module is simple and easy, and does not require a dedicated analog output program, such as for continuous line control, further reducing programming time.

#### GX Works3 wave output data setup



#### Pressure control of injection molding



### Shift operation and scaling without programs

Shift operation and scaling can be used without creating programs; they can be simply set on parameters. This simple setting minimizes program development cost as well as the program size.

**Analog output module specifications**

Item	R60DA4	R60DAV8	R60DAI8	R60DA8-G	R60DA16-G
Number of analog output points (ch)	4	8	8	8	16
<b>Accuracy</b>					
Ambient temperature 25 ±5°C	±0.1%	±0.1%	±0.1%	±0.1%	±0.1%
Ambient temperature 0...55°C	±0.3%	±0.3%	±0.3%	-	-
Temperature coefficient	-	-	-	±50 ppm/°C	±50 ppm/°C
<b>Common</b>					
Conversion speed (ch)	80 μs	80 μs	80 μs	1 ms	1 ms
Channel isolation	-	-	-	Transformer isolation	Transformer isolation
Output short-circuit protection	●	●	●	●	●
External supply power (V DC)	24	24	24	-	-
SIL 2-compliant	-	-	-	●*1	-
<b>Voltage output</b>					
Digital input value	-32000...32000	-32000...32000	-	-32000...32000	-32000...32000
Analog output voltage (V DC)	-10...10	-10...10	-	-12...12	-12...12
<b>Current output</b>					
Digital input value	0...32000	-	0...32000	0...32000	0...32000
Analog output current (mA DC)	0...20	-	0...20	0...20	0...20
<b>Function</b>					
Firmware update*2	●	●	●	-	-
External interface*3	-	-	-	-	-
18-point screw terminal block	●	●	●	-	-
40-pin connector	-	-	-	●	● (2x)

System configuration

CPU

I/O

**High-speed analog output module specifications**

Item	R60DAH4
Number of channels	4
<b>Accuracy</b>	
Ambient temperature 25 ±5°C	±0.1%
Ambient temperature 0...55°C	±0.3%
<b>Output specifications</b>	
Operation mode	High-speed output mode (conversion speed: 1 μs/CH)
	Normal output mode (conversion speed: 10 μs/CH)
	Wave output mode (conversion speed: 20 μs/CH)
<b>Voltage output</b>	
Digital input value	-32000...32000
Analog output voltage (V DC)	-10...10
<b>Current output</b>	
Digital input value	0...32000
Analog output current (mA DC)	0...20
<b>Function</b>	
Firmware update*2	●
External interface*3	-
18-point screw terminal block	●

Analog

Motion, Positioning, High-speed Counter, Channel isolated pulse input

Network

**SIL2 analog control output module specifications**

Item	RY40PT5B-AS
Number of output points	16
Rated load voltage (V DC)	24
Max. load current (A/point)	0.5
Response time (ms)	≤ 1.5
Control cycle time (ms)	2
Common terminal arrangement (points/common)	16
<b>External interface*3</b>	
18-point screw terminal block	●

Advanced information

Technology

Software

\*1. When used together with a SIL 2 redundant control system (SIL 2 is supported in the module firmware version of "02" or later).

\*2. For more information, please refer to the relevant product manual.

\*3. For more information about external interface (for applicable options, please refer to the relevant product manual), please refer to the options list on page 115.