MELSEC-L Series Analog I/O Modules

Analog I/O Modules

Analog input and output modules can be added on and configured easily in GX Works2 using built-in utilities.

Model Number		L60AD4 (Analog Input Module)				L60DA4 (Analog Output Module)			
Stocked Item		S				S			
Certification		UL • cUL • CE							
Number of Analog I/O Points		4 points (ch)							
Analog I/O	Voltage	-10 to 10VDC (Input resistance value 1MΩ)				-10 to 10VDC (External load resistance value 1kΩ to 1MΩ)			
	Current	0 to 20mADC (Input resistance value 250Ω)				0 to 20mADC (External load resistance value 0Ω to 600Ω)			
Digital Output	Output	-20480 to 20479							
	When Using Scaling Function	-32768 to 32767							
I/O Characteristics, Resolution		**Analog Input Range**		**Digital Output Value**	**Resolution**	**Analog Output Range**		**Digital Value**	**Resolution**
		Voltage	0 to 10V	0 to 20000	500µV	Voltage	0 to 5V	0 to 20000	250µV
			0 to 5V		250µV		1 to 5V		200µV
			1 to 5V		200µV		-10 to 10V	-20000 to 20000	500µV
			-10 to 10V	-20000 to 20000	500µV		Users range setting		333µV (*1)
			Users range setting		307µV (*1)	Current	0 to 20mA	0 to 20000	1000nA
		Current	0 to 20mA	0 to 20000	1000nA		4 to 20mA		800nA
			4 to 20mA		800nA		Users range setting	-20000 to 20000	700nA (*1)
			Users range setting	-20000 to 20000	1230nA (*1)				
Accuracy	Ambient Temperature 25 ±5°C	±0.1% (±20 digit)				±0.1% (voltage: ±10mA, current: ±20µA)			
	Ambient Temperature 0 to 55°C	±0.2% (±40 digit)				±0.3% (voltage: ±30mV, current: ±60µA)			
Conversion Speed		High speed: 20µs/ch; Medium speed: 80µs/ch; Low speed: 1ms/ch				20µs/ch			
Absolute Maximum Input		Voltage: ±15V, Current: 30mA (*2)				-			
Output Short Protection		-				Available			
External Power Supply		-				24VDC (+20%/-15%); Ripple, spike within 500mVp-p Inrush current: 4.3A, 1000µs or less; Current consumption: 0.18A			
I/O Device Points Occupied		16 points (I/O assignment: 16 points for Intelligent function module)							
External Connections		18-point terminal block							
5VDC Internal Current Consumption		0.52A				0.16A			
Weight (kg)		0.19				0.20			
Dimensions (W x H x D) mm		28.5 x 90 x 117							

Notes:
1. Maximum resolution in users range settings.
2. Maximum instantaneous current value that will not cause destruction of the internal components. The maximum constant input current value is 24mA.

Analog I/O Modules

Model Number		L60ADVL8	L60ADIL8
Stocked Item		S	S
Certification		UL • cUL • CE	
Number of Analog I/O Points		8 points (8 ch)	
Analog I/O	Voltage	-10 to 10 VDC (input resistance 1.8M Ω)	0 to 20mADC (input resistance 250 Ω)
Digital Output	Output	-16384 to 16383	-8192 to 8192
	When Using Scaling Function	-32768 to 32767	

I/O Characteristics, Resolution				

L60ADVL8

	Analog Input Range	Digital Output Value	Resolution
Voltage	0 to 10V	0 to 16000	625µV
	0 to 5V	0 to 8000	625µV
	1 to 5V		500µV
	-10 to 10V	-16000 to 16000	625µV
	1 to 5V (Extended mode)	-2000 to 9000	500µV
	Users range setting	-8000 to 8000	414µV

L60ADIL8

	Analog Input Range	Digital Output Value	Resolution
Current	0 to 20mA	0 to 8000	2500nA
	4 to 20mA		2000nA
	4 to 20mA (Extended mode)	-2000 to 9000	2500nA
	User range setting	-8000 to 8000	1660nA

Accuracy (Accuracy for the Maximum Value of the Digital Output Value)

L60ADVL8

	Analog Input Range	Ambient Temperature 25±5°C	Ambient Temperature 0 to 55°C
Voltage	0 to 10V	Within ±0.2% (±32 digit)	Within ±1% (±160 digit)
	0 to 5V	Within ±0.2% (±16 digit)	Within ±1% (±80 digit)
	0 to 5V		
	-10 to 10V	Within ±0.2% (±32 digit)	Within ±1% (±160 digit)
	1 to 5V (Extended mode)	Within ±0.2% (±16 digit)	Within ±1% (±80 digit)

L60ADIL8

	Analog Input Range	Ambient Temperature 25±5°C	Ambient Temperature 0 to 55°C
Current	0 to 20mA	Within ±0.2% (±16 digit)	Within ±1% (±80 digit)
	4 to 20mAV		
	4 to 20mA (Extended mode)		

Conversion Speed	1ms/channel	
Absolute Maximum Input	Voltage: ±15V	Current: 30mA
I/O Device Points Occupied	16 points (I/O assignment: Intelligent 16 points)	
External Connections	18-point terminal block	
5VDC Internal Current Consumption	0.20A	0.21A
Weight (kg)	0.19	0.19
Dimensions (W x H x D) mm	28.5 x 90 x 117	28.5 x 90 x 117

A/D Converter Module

Model Number	L60AD4-2GH		
Stocked Item	S		
Certification	UL • cUL • CE		
Number of Analog I/O Points	4 points (4 channels)		
Analog I/O	**Voltage**	-10 to 10VDC (Input resistance value 1MΩ)	
	Current	0 to 20mADC (Input resistance value 250Ω)	
Digital Output	**Output**	-32000 to 32000	
	When Using Scaling Function	-32768 to 32767	

I/O Characteristics, Resolution	**Analog Input Range**		**Digital Output Value**	**Maximum Resolution**
	Voltage	0 to 10V	0 to 32000	312.5µV
		0 to 5V		156µV
		1 to 5V		125µV
		-10 to 10V	-32000 to 32000	312.5µV
		1 to 5V (Extended mode)	-8000 to 32000	125µV
		User range setting (bi-polar: voltage)	-32000 to 32000	200µV
	Current	0 to 20mA	0 to 32000	625nA
		4 to 20mA		500nA
		4 to 20mA (Extended mode)	-8000 to 32000	500nA
		User range setting (uni-polar: current)	0 to 32000	400nA

Accuracy for the Max. Value of Digital Output Value	**Reference Accuracy**	Within ±0.05% (±16 digit)
	Temp Coefficient	±40.1ppm/°C or lower
Conversion Speed		40µ/2 channels
Absolute Maximum Input		Voltage: ±15V, Current: 30mA
Offset/Gain Setting Count		Up to 100000 counts
Insulation Method		Between I/O terminals and programmable controller power supply: photocoupler isolation; Between analog input channels: dual channel transformer insulation
Dielectric Withstand Voltage		Between I/O terminals and programmable controller power supply: 500VAC for 1 minute; Between analog input channels: 1000VAC for 1 minute
Insulation Resistance		Between I/O terminals and programmable controller power supply: 500VDC 10MΩ or higher
Number of Occupied I/O Points		16 points (I/O assignment: 16 points for intelligent)
Connected Terminal		18-point terminal block
Applicable Wire Size		0.3 to 0.75mm²
Applicable Solderless Terminal		R1.25-3 (solderless terminals with sleeve are not usable)
5VDC Internal Current Consumption		0.76A
Weight (kg)		0.20
Dimensions (W x H x D) mm		28.5 x 90 x 117

D/A Converter Modules

Model Number	L60DAVL8				L60DAIL8			
Stocked Item	-				-			
Certification	UL • cUL • CE							
Number of Analog I/O Points	8 channels							
Digital Input	-16384 to 16383 (When the scaling function is used: -32768 to 32767)				-8192 to 8191 (When the scaling function is used: -32768 to 32767)			
Analog Output	-10 to 10 VDC (external load resistance 1kΩ to 1MΩ)				0 to 20 mADC (external load resistance 0Ω to 600Ω)			

I/O Characteristics, Resolution (*1)		Analog Output Range	Digital Value	Resolution		Analog Output Range	Digital Value	Resolution
	Voltage	0 to 5V	0 to 8000	625µV	Current	0 to 20mA	0 to 8000	2500nA
		1 to 5V		500µV		4 to 20mA		2000nA
		-10 to 10V	-16000 to 16000	625µV		User range setting	-8000 to 8000	707nA (*2)
		User range setting	-8000 to 8000	320µV (*2)				

Accuracy for the Max. Value of Digital Output Value (*3)	Ambient Temperature 25±5°C	Within ±0.3% (±30mV)	Within ±0.3% (±60µA)
	Ambient Temperature 0 to 55°C	Within ±0.5% (±50mV)	Within ±.0% (±200µA)

Conversion Speed	Normal Output Mode	200µs/channel	
	Wave Output Mode	200µs/channel	
Number of Offset/Gain Settings		Up to 10000 counts	
Output Short Protection		Protected	
Insulation Method		Between I/O terminals and programmable controller power supply: photocoupler isolation Between output channels: no insulation Between external power supply and analog output: transformer insulation	
Dielectric Withstand Voltage		Between I/O terminals and programmable controller power supply: 500VACrms for 1 minute Between external power supply and analog output: 500VACrms for 1 minute	
Insulation Resistance		Between I/O terminals and programmable controller power supply: 500VDC 10MΩ or higher	
Number of Occupied I/O Points		16 points (I/O assignment: Intelligent 16 points)	
Number of Occupied Modules		2	
External Interface		18-point terminal block	
Applicable Wire Size		0.3 to 0.75mm²	
Applicable Solderless Terminal		R1.25-3 (solderless terminals with sleeve are not usable)	
External Power Supply		24VDC +20%, -15%, Ripple, spike 500mVP-P or lower, Inrush current: 3.9A, 2.0ms or shorter	
External Current Consumption		0.13A	0.25A
5VDC Internal Current Consumption		0.15A	
Weight (kg)		0.22	
Dimensions (W x H x D) mm		90 x 45 x 117	90 x 45 x 117

Notes:
1. For details on the I/O conversion characteristics, refer to I/O Conversion Characteristic of D/A Conversion in the manual.
2. Maximum resolution in the user range setting.
3. Except when receiving noise influence.

Combination Analog Module

Model Number	L60AD2DA2
Stocked Item	S
Certification	UL • cUL • CE
Number of Analog Output Points	2 points (2 channels)
Number of Analog Input Points	2 points (2 channels)

Digital Input	Input	-16384 to 16383
	With Scaling Function	-32768 to 32767
Analog Output	Voltage	-10 to 10VDC (external load resistance 1kΩ to 1MΩ)
	Current	0 to 20mADC (External load resistance 0Ω to 600Ω)
Analog Input	Voltage	-10 to 10 VDC (input resistance 1MΩ)
	Current	0 to 20mADC (input resistance 250Ω)
DIgital Output	Output	-16384 to 16383
	With Scaling Function	-32768 to 32767

I/O Characteristics, Resolution (*1)

	Analog Output Range		Digital Input Value	Resolution
Voltage	0 to 5V		0 to 12000	416µV
	1 to 5V			333µV
	-10 to 10V		-16000 to 16000	625µV
	User Range Setting (Bi-Polar: Voltage)		-12000 to 12000	319µV (*2)
Current	0 to 20mA		0 to 12000	166nA
	4 to 20mA			1333nA
	User Range Setting		-12000 to 12000	696nA (*2)

1. Analog Input Range		2. Digital Output Value	3. Resolution
5. 0 to 10V		6. 0 to 16000	7. 625µV
8. 0 to 5V		9. 0 to 12000	10. 416µV
11. 1 to 5V			12. 333µV
13. -10 to 10V		14. -16000 to 16000	15. 625µV
16. 1 to 5V (Extended mode)		17. -3000 to 13500	18. 333µV
19. User Range Setting (Voltage)		20. -1200 to 12000	21. 321µV
23. 0 to 20mA		24. 0 to 12000	25. 1666nA
26. 4 to 20mA			27. 1333nA
28. 4 to 20mA (Extended mode)		29. -3000 to 13500	30. 1333nA
31. User Range Setting (Current)		32. -12000 to 12000	33. 1287nA (*2)

Accuracy (Accuracy for the Maximum Value of the Analog Output Value) (*3)

	Analog Output Range		Ambient Temperature	
			25 ±5°	0 to 55°
Voltage	0 to 5V		Within ±0.2% (±10mV)	Within ±0.4% (±20mV)
	1 to 5V			
	-10 to 10V		Within ±0.2% (±20mV)	Within ±0.4% (±40mV)
Current	0 to 20mA		Within ±0.2% (±40µA)	Within ±0.4% (±80µA)
	4 to 20mA			

34. Analog Input Range		35. Ambient Temperature	
		36. 25±5° C	37. 0~55° C
39. 0 to 10V		40. ±0.2% (±32 digit)	41. ± 0.3% (±48 digit)
42. -10 to 10V			
43. 0 to 5V		44. ± 0.2% (± 24 digit)	45. ± 0.3% (± 36 digit)
46. 1 to 5V			
47. 1 to 5V (Extended mode)			
49. 0 to 20mA			
50. 4 to 20mA			
51. 4 to 20 mA (Extended mode)			

Conversion Speed	80µ/channel (*4)
Output Short Protection	Protected
Offset/Gain Setting Count (Flash Memory Write Count) (*5)	Up to 100000 counts
Insulation Method	Between I/O terminals and programmable controller power supply: photocoupler isolation; Between I/O channels: no isolation Between the external power supply and analog I/O channels: transformer isolation
Dielectric Withstand Voltage	Between I/O terminals and programmable controller power supply: 500VAC for 1 minute; Between the external pwer supply and analog I/O: 500VAC for 1 minute
Insulation Resistance	Between I/O terminals and programmable controller power supply: 500VDC 10MΩ or higher
Number of Occupied I/O Points	16 points (I/O assignment: 16 points for intelligent)
Connected Terminal	18-point terminal block
Applicable Wire Size	0.3 to 0.75mm²
Applicable Solderless Terminal	R1.25-3 (solderless terminals with sleeve are not usable)
External Power Supply	24VDC +20%, -15%; Ripple, spike 500mVp-p or lower; Inrush current 3.5A, 1000µ or shorter; Current consumption 0.12A
Internal Current Consumption (5VDC)	0.17A
Weight (kg)	0.22
Dimensions (W x H x D) mm	28.5 x 90 x 117

Notes:
1. For details on the I/O conversion characteristic, refer to the I/O Conversion Characteristic of A/D Conversion in Users Manual.
2. Maximum resolution in the user range setting.
3. Except when receiving noise influence.
4. For details on the conversion speed, refer to the enable/disable settings and conversion speed of A/D and D/A in the Users Manual.
5. If the number of offset/gain settings exceeds 100000 times, an error (error code 170) occurs.

Multiple Input Module

Model Number		L60MD4-G		
Stocked Item		S		
Certification		UL • cUL • CE		
Number of Analog Input Points		4 points (4 channels)		
Analog Input	Voltage	-10 to 10 VDC (input resistance 1MΩ)		
	Current	0 to 20mADC (input resistance 250Ω)		
	Micro Voltage	-100 to 100mVDC		
	Thermocouple	Available type: 12 types K, J, T, E, N, R, S, B, U, L, PLII, W5Re/W26Re		
		Cold junction compensation resistor: Use the included cold junction compensation resistor (CJ)		
	Resistance Temperature Detector	Available type: 4 types Pt1000, Pt100, JPt100, Pt50		
		Measurement method: 3-wire system		
Digital Output	Value	Voltage, current, micro voltage: -20480 to 20479		
		Resistance temperature detector: Pt100 (-20 to 120°C), JPt100 (-20 to 120°C) • For Celsius: -2000 to 12000 • For Fahrenheit: 0 to 20000 Value rounded off to two decimal places × 100 times		
		Thermocouple, Resistance temperature detector (other than the above) • For Celsius: -2700 to 23000 • For Fahrenheit: -4000 to 32000 Value rounded off to one decimal place × 10 times		
	With Scaling Function	-32768 to 32767		

I/O Characteristics, Resolution				
	Analog Input Range		**Digital Output Value**	**Resolution**
	Voltage	0 to 10V	0 to 20000	500µV
		0 to 5V		250µV
		1 to 5V		200µV
		-10 to 10V	-20000 to 20000	500µV
		1 to 5V (extended mode)	-5000 to 22500	200µV
	Current	0 to 20mA	0 to 20000	1000nA
		4 to 20mA		800nA
		4 to 20mA (extended mode)	-5000 to 22500	800nA
	Micro Voltage	-100 to 100mV	-20000 to 20000	5µV

Thermocouple: B, R, S, N, PLII, W5Re/W26Re: 0.3°C K, E, J, T, U, L: 0.1°C	
Resistance temperature detector: Pt100 (-20 to 120°C), JPt100 (-20 to 120°C): 0.03°C Pt100 (-200 to 850°C), JPt100 (-200 to 600°C), Pt1000, Pt50: 0.1°C	

Accuracy	Voltage/Current/ Micro Voltage	Ambient temperature 25±5°C: Maximum value of the measurement range × (±0.3%) (±60 digits)
		Ambient temperature 0 to 55°C: Maximum value of the measurement range × (±0.9%) (±180 digits)
	Thermocouple	Ambient temperature 25±5°C: Full scale × (±0.15%)
		Ambient temperature 0 to 55°C: Full scale × (±0.3%)
	Cold Junction Compensation Resistor	Temperature measured value: -100°C or higher - within ±1.0°C
		Temperature measured value: -150°C to -100°C - within ±2.0°C
		Temperature measured value: -200°C to -150°C - within ±3.0°C

Conversion Speed	50ms/channel
Output Current for Temperature Detection	Pt100, JPt100, Pt50: 1mA, Pt1000: 0.2mA
Absolute Maximum Input	Voltage: ±15V, Current: 30mA
Insulation Method	Between input terminals and programmable controller power supply: Photocoupler Between input channels: Transformer
Dielectric Withstand Voltage	Between input terminals and programmable controller power supply: 500VACrms for 1 minute Between input channels: 500VACrms for 1 minute
Insulation Resistance	Between input terminals and programmable controller power supply: 500VDC 10MΩ or higher Between input channels: 500VDC 10MΩ or higher
Number of Occupied I/O Points	16 points (I/O assignment: Intelligent 16 points)
Disconnection Detection	Protected
Connected Terminal	18-point terminal block
Applicable Wire Size	0.3 to 0.75mm²
Applicable Solderless Terminal	R1.25-3 (solderless terminals with sleeve are not usable)
Internal Current Consumption (5VDC)	0.49A
Weight (kg)	0.19
Dimensions (W x H x D) mm	28.5 x 90 x 117

Temperature Input Module – RTD Input

Model	L60RD8	
Stocked Item	S	
Certification	UL • cUL • CE	
Number of Analog Input Points	8 points (8 channels)	
Output — Temperature Measured Value	-3280 to 15620	
Output — Digital Operation Value	-32768 to 32767	
Applicable RTD	9 types Pt100 (JIS C 1604-2013), JPt100 (JIS C 1604-1981), Pt1000, Pt50 (JIS C 1604-1981), Ni100 (DIN 43760 1987), Ni120 (DIN 43760 1987), Ni500 (DIN 43760 1987), Cu100 (GOST 6651-2009, α = 0.00428), Cu50 (GOST 6651-2009, α = 0.00428)	

Measured Temperature Range		Celsius	Fahrenheit
	Pt100	-20 to 120°C	-4 to 248°F
		-200 to 850°C	-328 to 1562°F
	JPt100	-20 to 120°C	-4 to 248°F
		-200 to 600°C	-328 to 1112°F
	Pt1000	-200 to 850°C	-328 to 1562°F
	Pt50	-200 to 650°C	-328 to 1202°F
	Ni100	-60 to 250°C	-76 to 482°F
	Ni120	-60 to 250°C	-76 to 482°F
	Ni500	-60 to 250°C	-76 to 482°F
	Cu100	-180 to 200°C	-292 to 392°F
	Cu50	-180 to 200°C	-292 to 392°F

Temperature Detecting Output Current (*1)		1mA	Pt100, JPt100, Pt50, Ni100, Ni120, Cu100, Cu50
		100µA	Pt1000, Ni500

Conversion Accuracy (*2)	Ambient Temperature 25±5°C	Accuracy (Refer to manual SH(NA)-081530ENG, MELSEC L RTD Input Module User's Manual)
	Ambient Temperature 0 to 55°C	Measured temperature range accuracy at RTD input.

Resolution (*3)	0.1°C
Conversion Speed	40ms/channel
Number of Sensor Two-Point Correction Settings	10000 times maximum
Insulation Method	Between input terminals and programmable controller power supply: Photocoupler; Between input channels: Non-insulation
Withstand Voltage	Between input terminals and programmable controller power supply: 500VACrms for 1 minute; Between input channels: Non-insulation
Insulation Resistance	Between input terminals and programmable controller power supply: 500VDC 10MΩ or higher; Between input channels: Non-insulation
Disconnection Detection (*4)	Available
Number of Occupied I/O Points	16 points (I/O assignment: Intelligent 16 points)
External connection System	24-point spring clamp terminal block
Applicable Cable Type (*5)	Solid wire, stranded wire, bar solderless terminal
Applicable Wire Size (*6)	Core 0.5 to 1.5mm² (24 to 16 AWG)
	Terminal hole size 2.4mm x 1.5mm
Applicable Solderless Terminal	AI 0.5-10WH [Applicable wire size: 0.5mm²]; AI 0.75-10GY [Applicable wire size: 0.75mm²]; A 1-10 [Applicable wire size: 1.0mm²]; A 1.5-10 [Applicable wire size: 1.5mm²]
Wire Strip Length	10mm
Internal Current Consumption (5VDC)	0.22A
Weight (kg)	0.15
Dimensions (W x H x D) mm	28.5 x 90 x 116.5

1. **Notes:**
1. Current is output only on channels in which conversion is being performed.
2. Except when receiving noise influence.
3. When the standard product (L60MD4-G) is replaced by this module, the resolution of Pt100 (-20 to 120°C) and JPt100 (-20 to 120°C) is different.
4. Select the setting for the output at disconnection detection from "Value just before disconnection", "Upscale", "Downscale", and "Any value".
5. When a stranded wire is used, attach a bar solderless terminal.
6. The solderless terminal having an end length of 10mm that complies with DIN 46228-1 can be used.

Temperature Control Modules

Model Number			L60TCTT4	L60TCRT4	L60TCTT4BW	L60TCRT4BW
Stocked Item			S	S	S	S
Certification			UL • cUL • CE			
Control Output			Transistor output			
Number of Temperature Input Points			4 channels/module			
Type of Usable Temperature Sensors, the Temperature Measurement Range, the Resolution, and the Effect From Wiring Resistance of 1Ω			Thermocouple	Resistive thermal device	Thermocouple	Resistive thermal device
Accuracy	Indication Accuracy	Ambient Temperature: 25 ±5°C	Full scale × (±0.3%)			
		Ambient Temperature: 0 to 55°C	Full scale × (±0.7%)			
	Cold Junction Temperature Compensation Accuracy: (Ambient Temperature: 0 to 55°C)	Temperature Process Value (PV): -100° C or More	Within ±1.0°C	-	Within ±1.0°C	-
		Temperature Process Value (PV): -150 to -100°C	Within ±2.0°C		Within ±2.0°C	
		Temperature Process Value (PV): -200 to -150°C	Within ±3.0°C		Within ±3.0°C	
Sampling Cycle			250ms/4 channels, 500ms/4 channels			
Control Output Cycle			0.5 to 100.0s			
Input Impedance			1MΩ			
Input Filter			0 to 100s (0: Input filter OFF)			
Sensor Correction Value Setting			-50.00 to 50.00%			
Operation at Sensor Input Disconnection			Upscale processing			
Temperature Control Method			PID ON/OFF pulse or two-position control			
PID Constants Range	PID Constants Setting		Can be set by auto tuning			
	Proportional Band (P)		0.0 to 1000.0% (0: Two-position control)			
	Integral Time (I)		0 to 3600s (set 0 for P control and PD control)			
	Derivative Time (D)		0 to 3600s (set 0 for P control and PI control)			
Set Value (SV) Setting Range			Within the temperature range set in the thermocouple/platinum resistance thermometer to be used			
Dead Band Setting Range			0.1 to 10.0%			
Transistor Output	Output Signal		ON/OFF pulse			
	Rated Load Voltage		10 to 30VDC			
	Max. Load Current		0.1A/point, 0.4A/common			
	Max. Inrush Current		0.4A 10ms			
	Leakage Current at OFF		0.1mA or less			
	Max. Voltage Drop at ON		1.0VDC (TYP) at 0.1A 2.5VDC (MAX) at 0.1A			
	Response Time		OFF–ON: 2ms or less, ON–OFF: 2ms or less			
Number of Accesses to Non-Volatile Memory			Max. 10^{12} times			
Heater Disconnection Detection Specifications	Current Sensor		-		See L Series User's Manual	
	Input Accuracy				Full scale × (±1.0%)	
	Number of Alert Delay				3 to 255	
Number of Occupied I/O Points			16 points (I/O assignment: 16 intelligent points)			
Number of Occupied Module			1		2	
External Connection			18-point terminal block		Two 18-point terminal blocks	
Internal Current Consumption			0.30A	0.31A	0.33A	0.35A
Weight (kg)			0.18		0.33	
Dimensions (W x H x D) mm			28.5 x 90 x 117		57.0 x 9 x 117	