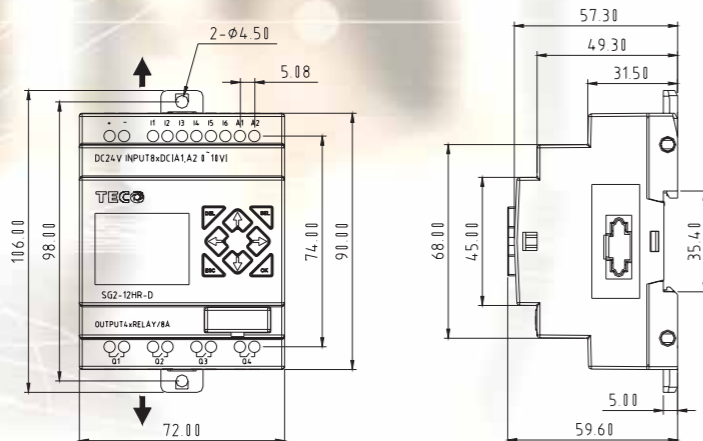
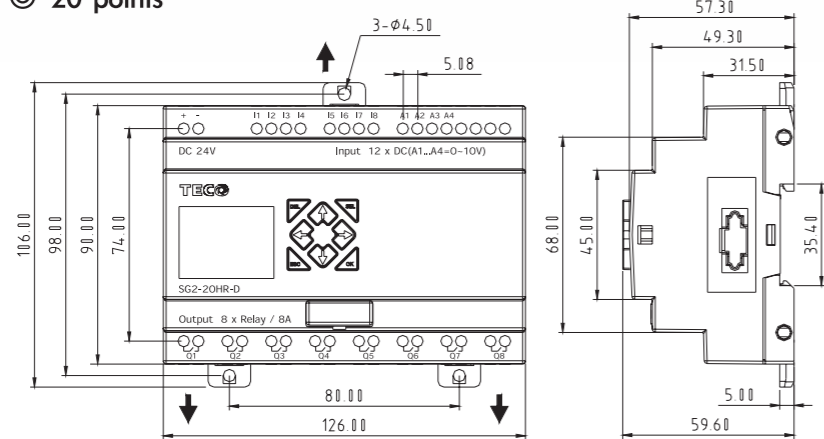


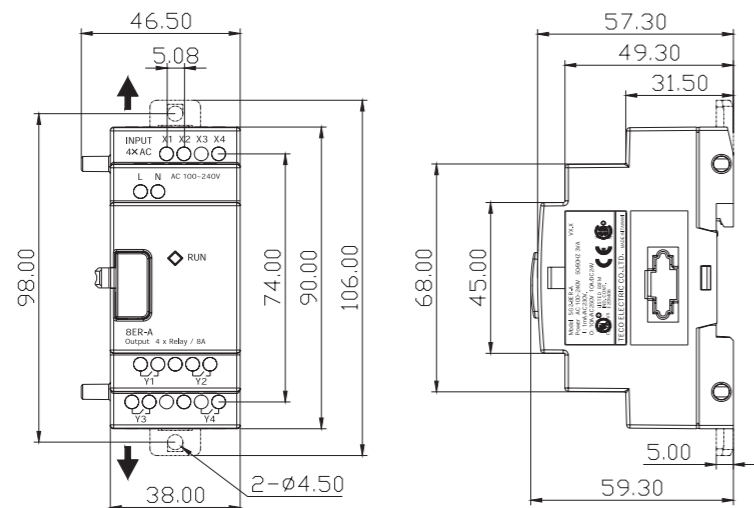
◎ 10/12 points



◎ 20 points



◎ Expansion Module (8 points)



SG2 Series

Advanced





System specification



Complete product line:10/12/20 points basic module , analog input / output , temperature input , relay or transistor outputs is optional.

- ◆ Max expansion 44 digital I/O points, including 3 sets of 8 points(4 inputs / 4 outputs) expansion modules. 1 set analog input module, 1 set temperature input module, 2 set analog output module (2 channel current or voltage output) and 1 set communication module.
- ◆ Analog input can expand to 8 points in which 4 points are 12 bits voltage/current input(0-10V / 4-20mA), temperature input can expand to 4 points(PT-100).
- ◆ Several communication expansion modules are available:Profibus-DP, Devicenet, Modbus RTU, Ethernet(TCP/IP).
- ◆ Built-in 16x4 LCD display and seven languages:English, French, Spanish, Italian, German, Portuguese and Simplified Chinese are selectable.
- ◆ Ladder format, max 300 lines, 4 instructions per line. FBD format, max 260 blocks.
- ◆ High speed counter input(1KHz) and pulse output are available.
- ◆ Built-in 31 multi-function timers, 31 sets of counter, 31 RTC comparators and 126 auxiliary, 31 analog compare.
- ◆ Lower price variant models without LCD Keypad and without top cover are available if order amounts reach TECO minimum production requirement.
- ◆ Basic module(V type) built-in Modbus port(RTU), 8 channel I/O link and Remote I/O communication port.
- ◆ Built-in RTC(setting summer / winter time change) will be operational up to 240 hours after power off.
- ◆ Relay output contact rating max 8A / Transistor output rating max 0.5A.
- ◆ Two possible levels(A, B) can set 16 bits password protection function.
- ◆ 2 PWM outputs are available. One can be used as PLSY(pulse output) at 1KHZ.

Item	Specification	
Method of input program	By means of Ladder/Function Block	
Operating Environment	Operating temperature	-20-55°C
	Storage temperature	-40-70°C
Main Structure	Operating humidity	5-90% RH no frost
	Environment gas	No corrosive gas environment
	Vibration resistance	IEC60068-2-6 Standard
Noise proofing	Impact resistance	0.075mm amplitude/1.0g acceleration
	ESD	15g peak, 11ms duration
	EFT	Contact ±4KV, air discharge ±8KV
Installation	CS	Power AC: ±2KV DC: ±1KV
	RS	0.15-80MHz 10V/m
	EMI	80-1000MHz 10V/m
Size of cable	Enclosure Protection	EN55011 class B
	Fixing Method	IP20
Dimension	Direction	Direct or Din rail(35mm)installation
	Size of cable	Please refer to installation manual
	Dimension	AWG 12/φ 3.5mm ²
Expansion	Dimension	72×90×59.6mm 10 points basic module
	Dimension	126×90×59.6mm 20 points basic module
	Dimension	38×90×59.6mm expansion module

	Model	Power supply			Input	Output point	Analog input	LCD Key	Expansion ability	High speed input	PWM Output	I/O LINK	
		AC 100-240V	DC 24V	DC 12V									
10 point Variant	Expandable Type (★: project requested)												
		10HR-A	◎			6	4	Relay		◎	◎		
		12HR-D		◎		8*	4	Relay	2	◎	◎	◎	
		12HT-D		◎		8*	4	Transistor	2	◎	◎	◎	◎
		12HR-12D			◎	8*	4	Relay	2	◎	◎	◎	
	Expandable & without control panel(★: project requested)												
	★	10KR-A	◎			6	4	Relay			◎		
	★	12KR-D		◎		8*	4	Relay	2		◎		
	★	12KT-D		◎		8*	4	Transistor	2		◎	◎	
	★	12KR-12D			◎	8*	4	Relay	2		◎	◎	
	Standard & without upper-cover (Economical Type) (★: project requested)												
	★	10CR-A	◎			6	4	Relay					
★	12CR-D		◎		8*	4	Relay	2			◎		
★	12CT-D		◎		8*	4	Transistor	2			◎	◎	
20 point model	Expandable Type												
		20HR-A	◎			12	8	Relay		◎	◎		
		20HR-D		◎		12*	8	Relay	4	◎	◎	◎	
		20HT-D		◎		12*	8	Transistor	4	◎	◎	◎	◎
		20HR-12D			◎	12*	8	Relay	4	◎	◎	◎	
	Expandable & without control panel (BIind Type) (★: project requested)												
	★	20KR-A	◎			12	8	Relay			◎		
	★	20KR-D		◎		12*	8	Relay	4		◎	◎	
	★	20KT-D		◎		12*	8	Transistor	4		◎	◎	◎
	★	20KR-12D			◎	12*	8	Relay	4		◎	◎	
	Standard & without upper-cover (Economical Type)												
	★	20CR-A	◎			12	8	Relay					
★	20CR-D		◎		12*	8	Relay	4			◎		
★	20CT-D		◎		12*	8	Transistor	4			◎	◎	
High speed communication Type													
	20VR-D		◎		12*	8	Relay	4	◎	◎	◎		
	20VT-D		◎		12*	8	Transistor	4	◎	◎	◎	◎	
Expansion		8ER-A	◎		4	4	Relay						
		8ER-D		◎	4	4	Relay						
		8ET-D		◎	4	4	Transistor						

SG2-8ET-D

SG2-DNET

SG2-MBUS

SG2-PBUS

* The input points consist of the ones having analog input function.



Expansion and option model

Model	Part No.	Instruction
Power supply	10PS-12	Input:AC100~240V / Output:12V 1.9A
Power supply	10PS-24	Input:AC100~240V / Output:24V 1.3A
Analog input	SG2-4AI	4 points are 12 bits voltage / current input(0-10V / 0-20mA)
* 1 Analog output	SG2-2AO	2 channel Output Module(voltage / current:0-10V / 0-20mA)
* 1 Temperature input	SG2-4PT	Temperature Input Module(4 channel PT-100 input)
Communication	SG2-MBUS	Modbus Communication Module(DC24V)
Communication	SG2-PBUS	Profibus Communication Module(DC24V)
Communication	SG2-DNET	Devicenet Communication Module(DC24V)
Communication	EN01	Ethernet(TCP/IP)Communication Module(DC24V)
Mempack	PM05 3rd	Download / Upload program
PC interface cable	PL01	PC-Link cable
PDA connector	JNSWPDA	PDA-Link interface

Notes : SG2 PDA software can be used by WIN CE interface and link HP hx2190 PDA by PDA cable(JNSWPDA)

* 1:It cannot be used for SG2 firmware V3.0 and below