

Programmable Logic Relay

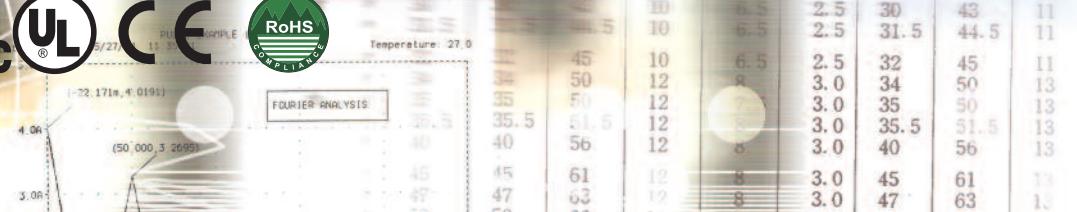
TECO

SG2 Series

3RD
Generation



ISO 14001
BSMI





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

- ◆ All SG2 "V-type", "H-type", and "K-type" units are expandable. Maximum expansion allows for 3 digital modules, 2 analog output modules, and 2 analog input modules: 1 each of SG2-4PT (temperature) and SG2-4AI (voltage/current).
- ◆ 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).
- ◆ 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.
- ◆ 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.
- ◆ Application program stored in non-volatile Flash memory
- ◆ 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
	Operating humidity	5~90% RH no frost
	Environment gas	No corrosive gas environment
Main Structure	Vibration resistance	IEC60068-2-6 Standard 0.075mm amplitude/1.0g acceleration
	Impact resistance	IEC60068-2-27 Standard 15g peak, 11ms duration
Noise proofing	ESD	Contact ±4KV, air discharge ±8KV
	EFT	Power AC: ±2KV DC: ±1KV
	CS	0.15~80MHz 10V/m
	RS	80~1000MHz 10V/m
	EMI	EN55011 class B
Installation	Enclosure Protection	IP20
	Fixing Method	Direct or Din rail(35mm)installation
	Direction	Please refer to installation manual
Size of cable	AWG 12/Φ 3.5mm ²	
Dimension	72×90×59.6mm 10 points basic module	
	126×90×59.6mm 20 points basic module	
	38×90×59.6mm expansion module	



System specification

	Model (SG2-xxxx-xx)	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								
Expandable Type												
	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 (★: special order)												
	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) (★: special order)												
	10CR-A	◎			6	4	Relay					
	12CR-D		◎		8*	4	Relay	2		◎		
★	12CT-D		◎		8*	4	Transistor	2		◎	◎	
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 (Blind Type) (★: special order)												
	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) (★: special order)												
	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					

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



Expansion and option model

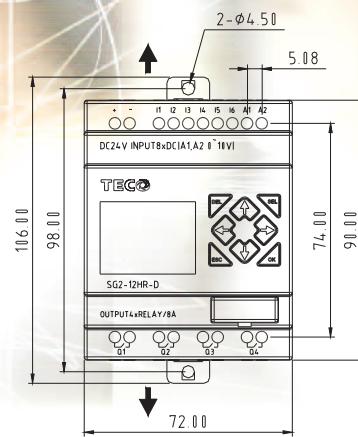
Model	Part No.	Specification
Power supply	SG2-10PS-12	Input:AC100~240V / Output:12V 1.9A (Special Order)
Power supply	SG2-10PS-24	Input:AC100~240V / Output:24V 1.3A
Analog input	SG2-4AI	4 points are 12 bits voltage / current input(0-10V / 0-20mA)
*1 Analog output	SG2-2AO	2 channel Output Module(voltage / current:0-10V / 0-20mA)
*1 Temperature input	SG2-4PT	Temperature Input Module(4 channel PT-100 input)
Mempack	SG2-PM05 3rd	Download / Upload program
Programming cable	SG2-PL01	RS-232 PC-Link cable
Programming cable	SG2-ULINK	USB PC-Link cable

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

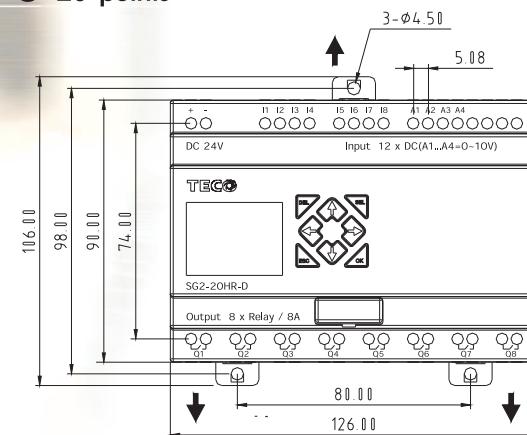


Dimension (unit:mm)

◎ 10/12 points



◎ 20 points



◎ Expansion Module (8 points)

