## **FGs Series**

View



W2



Model	FGs-16MR-AC	FGs-16MT-AC		
Structure & environment				
Size	109.5	5×92×80mm		
Weight	465g 454g			
Working environment	0.55			
temperature	0~55	C (no freeze)		
Working environment				
humidity	5~95%KH (no condensate)			
Shockproof degree	10~25Hz (XYZ direct	tion, 2g acceleration, 30min)		
Power supply				
Power consumption	3.2W	2.6W		
Power voltage	100	)~240V/AC		
Input parameter				
Digital input channels	8	8		
Input wiring	Support SINK/SRCE	(drain type and source type)		
Input voltage	24	V±20%/DC		
High-speed input	2 channels 200kHz maxima			
Output parameter				
Digital output channels	8	8		
Output type	Relay	transistor/NPN		
Output voltage	<250V/AC, 30V/DC	6~30V/DC		
High-speed output	None	2 channels 200kHz maxima		
Inductive load maximum	80W	12W		
		0.2A (ordinary point), 0.5A (high-speed		
Resistive load maximum	2A (output point), 4A (common port)	point), 3A (common-port)		
FCC compatibility				
High voltage test	TOOL			
	Meet requirements	s of CE55032 and CE55035		
Protection level		1930		
Interface				
RS232	One RS232 serial port receptacle,	support download, upload, monitor, and		
		aud rate: 1200~115200Bps		
RS485	Une K5485 serial port receptad	115200Pmc		
Ethorpot	4800	~115200Bps		
	One P type LICP resents -1-	support download unload menitor		
Softwara	One b-type Osb receptacle,			
Lippor Machine Coffman	0	am <sup>c</sup> oar II		
opper iviachine Software	Sa	amsoar II		

Model	FGs-24MR-AC	FGs-24MT-AC		
Structure & environment				
Size	125.5×92×80mm			
Weight	525g 525g			
Working environment	0.55			
temperature	U∼55℃ (no freeze)			
Working environment				
humidity	5~95%RH (no condensate)			
Shockproof degree	10~25Hz (XYZ direct	tion, 2g acceleration, 30min)		
Power supply				
Power consumption	4W	2.8W		
Power voltage	100	)~240V/AC		
Input parameter				
Digital input channels	12	12		
Input wiring	Support SINK/SRCE	(drain type and source type)		
Input voltage	24	V±20%/DC		
High-speed input	2 channels 200kHz maxima			
Output parameter				
Digital output channels	12	12		
Output type	Relay	transistor/NPN		
Output voltage	<250V/AC, 30V/DC 6~30V/DC			
High-speed output	None 2 channels 200kHz maxim			
Inductive load maximum	80W 12W			
		0.2A (ordinary point), 0.5A (high-speed		
Resistive load maximum	2A (output point), 4A (common port)	point), 3A (common-port)		
FOO				
FCC compatibility				
High voltage test	1000			
	Meet requirements	s of CE55032 and CE55035		
Protection level		1930		
Interface				
RS232	One RS232 serial port receptacle, communication. Ba	support download, upload, monitor, and aud rate: 1200~115200Bps		
	One RS485 serial port receptac	le, support communication. Baud rate:		
RS485	4800	~115200Bps		
Ethernet		None		
USB	One B-type USB receptacle,	support download, upload, monitor		
Software				
Upper Machine Software	S	amSoar II		

Model	FGs-32MR-AC	FGs-32MT-AC		
Structure & environment				
Size	147.6×92×80mm			
Weight	590g 563g			
Working environment	0.55			
temperature	U~55℃ (no freeze)			
Working environment				
humidity	5~95%RH (no condensate)			
Shockproof degree	10~25Hz (XYZ direct	tion, 2g acceleration, 30min)		
Power supply				
Power consumption	5.2W	3W		
Power voltage	100	)~240V/AC		
Input parameter				
Digital input channels	16	16		
Input wiring	Support SINK/SRCE	(drain type and source type)		
Input voltage	24	V±20%/DC		
High-speed input	2 channels 200kHz maxima			
Output parameter				
Digital output channels	16	16		
Output type	Relay	transistor/NPN		
Output voltage	<250V/AC, 30V/DC	6~30V/DC		
High-speed output	None	2 channels 200kHz maxima		
Inductive load maximum	80W 12W			
		0.2A (ordinary point), 0.5A (high-speed		
Resistive load maximum	2A (output point), 4A (common port)	point), 3A (common-port)		
FCC compatibility				
High voltage test	1000			
	Meet requirements	s of CE55032 and CE55035		
Protection level		1930		
Interface				
RS232	One RS232 serial port receptacie, communication. Ba	support download, upload, monitor, and aud rate: 1200~115200Bps		
20105	One RS485 serial port receptad	e, support communication. Baud rate:		
RS485	4800	~115200Bps		
Ethernet		None		
USB	One B-type USB receptacle,	support download, upload, monitor		
Software				
Upper Machine Software	S	amSoar II		

Model	FGs-48MR-AC	FGs-48MT-AC		
Structure & environment				
Size	185.7×92×80mm			
Weight	710g 710g			
Working environment		/		
temperature	0∼55°C (no freeze)			
Working environment				
humidity	5~95%RH (no condensate)			
Shockproof degree	10~25Hz (XYZ directio	n, 2g acceleration, 30min)		
Power supply				
Power consumption	6W	3.4W		
Power voltage	100~:	240V/AC		
Input parameter				
Digital input channels	24	24		
Input wiring	Support SINK/SRCE (dr	ain type and source type)		
Input voltage	24V±	:20%/DC		
High-speed input	2 channels 200kHz maxima			
Output parameter				
Digital output channels	24	24		
Output type	Relay	transistor/NPN		
Output voltage	<250V/AC, 30V/DC	6~30V/DC		
High-speed output	None	2 channels 200kHz maxima		
Inductive load maximum	80W	12W		
		0.2A (ordinary point), 0.5A (high-speed		
Resistive load maximum	2A (output point), 4A (common port)	point). 3A (common-port)		
500				
FCC compatibility	FCC	class A		
High voltage test	10007			
CE certification	Meet requirements o	f CE55032 and CE55035		
Protection level		230		
Interface				
RS232	One RS232 serial port receptacle, support download, upload, monitor, and communication. Baud rate: 1200~115200Bos			
	One RS485 serial port receptacle,	support communication. Baud rate:		
RS485	4800~1	15200Bps		
Ethernet	Ν	lone		
USB	One B-type USB receptacle, su	pport download, upload, monitor		
Software				
Upper Machine Software	Sam	iSoar II		

Model	FGs-64MR-AC	FGs-64MT-AC		
Structure & environment				
Size	216×92×80mm			
Weight	831g 769g			
Working environment	0.55			
temperature	U~55℃ (no freeze)			
Working environment				
humidity	5~95%RH (no condensate)			
Shockproof degree	10~25Hz (XYZ direct	ion, 2g acceleration, 30min)		
Power supply				
Power consumption	6.8W	3.6W		
Power voltage	100	~240V/AC		
Input parameter				
Digital input channels	32	32		
Input wiring	Support SINK/SRCE	(drain type and source type)		
Input voltage	24	V±20%/DC		
High-speed input	4 channels 200kHz maxima			
Output parameter				
Digital output channels	32	32		
Output type	Relay	transistor/NPN		
Output voltage	<250V/AC, 30V/DC 6~30V/DC			
High-speed output	None 4 channels 200kHz maxim			
Inductive load maximum	80W	12W		
		0.2A (ordinary point), 0.5A (high-speed		
Resistive load maximum	2A (output point), 4A (common port)	point), 3A (common-port)		
500 """				
FCC compatibility	FC	C class A		
High voltage test	1000	JV/AC, 1min		
CE certification	meet requirements	s of CE55032 and CE55035		
Protection level		IP30		
Interface				
RS232	One RS232 serial port receptacle,	support download, upload, monitor, and		
	One PS/85 serial port recentac	le support communication Baud rate:		
RS485		~115200Bps		
Fthernet	4000	None		
LISR	One B-type LISR recentacle	support download unload monitor		
Software				
		am <sup>c</sup> oar II		

## **FGs Extension Modules**







Model	FGs-E16R FGs- FGs- FGs-E8X8R		FGs-E8X8R	FGs-		
		E16T	E16X		E8X8T	
Structure &						
environment						
Size		109.	2×61.7×8(	)mm		
Weight			250g			
Working environment		0~55	5℃ (no fr	2020)		
temperature		0 50		5626)		
Working environment			U (na aan	donasto)		
humidity		J-95%K		uensale)		
Shockproof degree	10~25	5Hz (XYZ dire	ction, 2g a	cceleration, 30min)		
Power supply						
Power consumption			1.5W			
Input parameter						
Digital input channels	-	-	16 8 8			
Input wiring	-	-	Support SINK/SRCE (drain type and source type)			
Input voltage	-	-	24V±20%/DC			
Output parameter						
Digital output channels	16	16	-	8	8	
	Relay	transistor		Relay	transistor	
Output type	Nelay	/NPN		Nelay	/NPN	
		6~30V/D			6~30V/D	
Output voltage	<23007AC, 3007DC	С		<230V/AC, 30V/DC	С	
Inductive load	80\\/	12\//		12\\/	80\\/	
maximum	0000	TZAA		12.00	0000	
Resistive load	2A (output-point), 4A	0.24		2A (output-point), 4A	0.24	
maximum	(common-port)	0.5A	-	(common-port)	0.3A	
FCC compatibility		F	CC class A	Ą		
High voltage test		100	)0V/AC, 1r	min		
CE certification	Mee	t requiremen	ts of CE55	032 and CE55035		
Protection level	IP30					
Software						
Upper Machine			C C			
Software	SamSoar II					

Model	FGs-E4AI2AO-C	FGs-E4TC-C	FGs-E8AI-C		
Structure & environment					
Size	109.2×61.7×80mm				
Weight	250g				
Working environment temperature	0∼55°C (no freeze)				
Working environment humidity	5~95%RH (no condensate)				
Shockproof degree	10~25Hz (XYZ direction, 2g acceleration, 30min)				
Power supply					
Power consumption	2W	0.5W	0.5W		
Input parameter					
Analog input channels	4	4	8		
Input mode	Voltage/Current	3-wire RTD, Thermocouple	Voltage/Current		
Measurement range	0~5V, 0~10V, 4~20mA	-200~850°C	0~5V, 0~10V, 4~20mA		
Input maximum	12V, 30mA	12V, 30mA	12V, 30mA		
	0~5V: 1.25mV		0~5V: 1.25mV		
Input resolution	0~10V: 2.5mV	0.1°C	0~10V: 2.5mV		
	4~20mA: 5uA		4~20mA: 5uA		
Conversion accuracy	12 bits	16 bits	12 bits		
Measurement accuracy	±5‰	±1°C	±5‰		
Output parameter					
Digital output channels	2	-	-		
Output mode	Voltage/Current	-	-		
Output range	0~5V, 0~10V, 4~20mA	-	-		
	0~5V: 0.1mV				
Output resolution	0~10V: 0.2mV	-	-		
	4~20mA: 0.4uA				
Output accuracy	±5‰	-	-		
	5V: ≥1kΩ				
Output load impedance	10V: ≥500Ω	-	-		
	20mA: ≥500Ω				
High voltage test		FCC class A			
CE certification	1000V/AC, 1min				
Protection level	meet re	equirements of CE55032 and C	E55035		
	IP30				
Software					
Upper Machine Software		SamSoar II			

## **FGR Series**







Model	FGRB-C8X8T-2/2	FGRS-C8X8T-4/4	FGRB-C8X6R	
Structure & environment				
Size	25.2×92×63.4mm			
Weight	102g			
Working environment		0. EE°C (no frooze		
temperature		0~55 C (no freeze	;)	
Working environment	5~95%RH (no condensate)			
humidity				
Shockproof degree	10~25	Hz (XYZ direction, 2g acce	leration, 30min)	
Power supply				
Power consumption		1.5W		
Power voltage		24V±20%/DC		
Input parameter				
Digital input channels		8		
Input wiring	Suppo	rt SINK/SRCE (drain type a	nd source type)	
Input voltage		24V±20%/DC		
High speed input	2 channels 200kHz	4 channels 200kHz	None	
nign-speed input	maxima	maxima	NUTE	
Output parameter				
Digital output channels	8	8	8	
Output type	transistor/NPN	transistor/NPN	Relay	
Output voltage	6~30V/DC	6~30V/DC	<250V/AC, 30V/DC	
High-speed output	2 channels 200kHz	4 channels 200kHz	None	
ingir opood output	maxima	maxima		
Inductive load maximum	12W	12W	80W	
Resistive load maximum	0.3A	0.3A	2A (output-point), 4A	
			(common-port)	
FCC compatibility		FCC class A		
High voltage test		1000V/AC, 1min		
CE certification	mee	t requirements of CE55032	and CE55035	
Protection level		IP30		
Interface				
RS232	Support download, upload, monitor, and communication. Baud rate:			
		1200~115200Bps		
RS485	Support	communication. Baud rate:	4800~115200Bps	
Ethernet		None		
USB	Support download, upload, and monitor			
Software				
Upper Machine Software		SamSoar II		

# **FGR Extension Modules**







Model	FGR-F12R FGR-			FGR-		
Model	FOR-LIZK	E16T E16X		FOR-LOADR	E8X8T	
Structure &						
environment						
Size		25.2	2×92×63.4	mm		
Weight			102g			
Working environment		056	5℃ (no fra	2020)		
temperature		0 50		(626)		
Working environment		5~05%P	H (no con	densate)		
humidity		5 95%		densate)		
Shockproof degree	10~25	5Hz (XYZ dire	ction, 2g a	cceleration, 30min)		
Power supply						
Power consumption			1.5W			
Input parameter						
Digital input channels	-	-	16 8 8			
Input wiring	-	-	Support SINK/SRCE (drain type and source type)			
Input voltage	-	-	24V±20%/DC			
Output parameter						
Digital output channels	12	16	-	8	8	
	Polov	transistor		Pelay	transistor	
Output type	Nelay	/NPN		Relay	/NPN	
	<250\//AC_30\//DC	6~30V/D		<250\//AC_30\//DC	6~30V/D	
output voltage	~200 W/X0, 00 W/D0	С		23007776, 000726	С	
Inductive load	80\W	12\\/	_	12W	80\\/	
maximum	0000	12.00		12 11	0011	
Resistive load	2A (output-point), 4A	0.3A	_	2A (output-point), 4A	0.3A	
maximum	(common-port)	0.0/1		(common-port)	0.071	
FCC compatibility		ł	CC class A	ł		
High voltage test		100	00V/AC, 1r	nin		
CE certification	mee	et requiremen	ts of CE55	032 and CE55035		
Protection level	IP30					
Software						
Upper Machine	ComCoor !!					
Software	Jainsual II					

Model	FGR-	FGR-	FGR-	FGR-	
Model	E4AI	E8AI	E4AI2AO	E2AO	FOR-E41C
Structure & environment					
Size			25.2×92×	<63.4mm	
Weight			10	2g	
Working environment			0. 55%	no franza)	
temperature			0~55 C (	no neeze)	
Working environment humidity			5~95%RH (nc	condensate)	
Shockproof degree		10~25	Hz (XYZ direction	2g accelerati	on, 30min)
Power supply					
Power consumption	15W	1.5W	2W	1.5W	0.5W
Input parameter					
Analog input channels	4	8	4	4	8
Input mode		Voltage/Cur	rent	_	3-wire RTD,
input mode		Voltage/ Cul	Tent		Thermocouple
Measurement range	0~	5V, 0~10V, 4	~20mA	-	-200~850°C
Input maximum		12V, 30m	A	-	12V, 30mA
		0~5V: 1.25	mV		
Input resolution	0~10V: 2.5mV			-	0.1°C
	4~20mA: 5uA				
Conversion accuracy	12 bits		-	16 bits	
Measurement accuracy	±5‰		-	±1°C	
Output parameter					
Digital output channels	- 2		2		-
Output mode		-	Voltage/0	Current	-
Output range		-	0~5V, 0~10V	, 4~20mA	-
			0~5V: 0	.1mV	
Output resolution		-	0~10V: (	).2mV	-
			4~20mA:	0.4uA	
Output accuracy		-	±5%	00	-
			5V: ≥	1kΩ	
Output load impedance		-	10V: ≥	500Ω	-
	20mA: ≥5			500Ω	
FCC compatibility			FCC c	lass A	
High voltage test			1000V/A	AC, 1min	
CE certification	Meet requirements of CE55032 and CE55035				
Software					
Upper Machine Software			SamS	ioar II	

## **FGm series**





Model	FGm-64MT-AC
Structure & environment	
Size	216×92×80mm
Weight	769g
Working environment	$0.55^{\circ}$ (op fragg)
temperature	
Working environment	5~05%PH (no condensate)
humidity	
Shockproof degree	10~25Hz (XYZ direction, 2g acceleration, 30min)
Power supply	
Power consumption	3.6W
Power voltage	100~240V/AC
Input parameter	
Digital input channels	32
Input wiring	Support SINK/SRCE (drain type and source type)
Input voltage	24V±20%/DC
High-speed input	12 channels 500kHz maxima
Output parameter	
Digital output channels	32
Output type	transistor/NPN
Output voltage	6~30V/DC
High-speed output	12 channels 500kHz maxima
Inductive load maximum	12W
Resistive load maximum	0.2A (ordinary point), 0.5A (high-speed point), 3A (common-port)
FCC compatibility	FCC class A
High voltage test	1000V/AC, 1min
CE certification	Meet requirements of CE55032 and CE55035
Protection level	IP30
Interface	
	One RS232 serial port receptacle, support download, upload, monitor, and
RS232	communication. Baud rate: 1200~115200Bps
RS485	One RS485 serial port receptacie, support communication. Baud rate:
Edu a un a t	4800~115200Bps
Ethernet	INONE
USB	One B-type USB receptacle, support download, upload, monitor
Software	
Upper Machine Software	SamSoar II

### Wiring diagram











RS 232

USB

RUN 🔄 STOP

FGRB-C8X8T-2/2

