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Automation Expert Customize your own control system

Shenzhen Coolmay Technology Co., Ltd. is a high-tech enterprise specialized in developing and manufacturing automation products and providing services for automation projects. Established in 2006, Coolmay has been focusing on providing customers with cost-effective embedded industrial control products, solutions and services, based on the belief of “cooperation, honesty, pragmatism, innovation”.

Coolmay produces a broad line of products including PLC, HMI, HMI/PLC all-in-one, power supply, amplification, network modules and etc.. Particularly with simple operation, flexibility, high effectiveness, Coolmay innovative integrated control concept is accepted by more and more people in the field, and Coolmay products made a great reputation with powerful integrated functions and high performance.

To meet the increasing personalized requirements, Coolmay sticks to the strategy of continuous innovation and flexible customization and offers high-performance industrial all-in-one control solutions, which truly saved time and cost, improved efficiency and enterprise competition in the markets. The solutions can be widely used forl medium-small equipment, central air conditioners, environmental projects and other industrial fields.

- Rich production line achieves a complete set of automation control solutions
- PLC and HMI software platforms meet the rapid development needs of users
- Compact design saves installation cost
- Pluggable terminals realized low-cost after-sale service
- Super encryption fully protects the intellectual property of users
- Analog I/O with internal integration greatly reduces cost
- Products can be customized according to users' requirements

※ Detailed information please refer to updated Coolmay catalog and user manuals of Coolmay PLC, HMI and modules.



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HMI/PLC All-in-One

Coolmay HMI/PLC all-in-one provides better solutions for machine manufacturers and end users by integrating PLC, HMI, I/O and analog. Easy to use, cost saving and high flexibility, it becomes more and more popular. It uses pluggable terminals on the inputs and outputs, power supplies, making installation and maintenance easier. Some users may not have any electrical knowledge, but they will be able to disassemble and install the devices, no need to worry how to wire. If the equipment broke down, manufactures can only replace a new one instead of door-to-door maintenance.

Features

- Integrated PLC, HMI, digital i/o (DI/DO), analog i/o (AD/DA), high speed functions, etc..
- Compatible with FX3G/FX3U/FX3S PLC, fast operation.
- Up to 30DI/30DO, 16AD/8DA.
- Default 2 PLC programming ports, 1 HMI download port, 1 USB port.
- Supports optional one or two Rs485, CAN, WIFI, network port on PLC, and supports optional Rs232, Rs485, network port on HMI.
- Supports multi-channel high speed count and pulse functions.
- 32,000-step program capacity and 32,000 power retentive registers. Supports interruption, linear arc interpolation and PID self-tuning.
- Supports special encryption. HMI and PLC can be encrypted respectively. Set PLC password as 12345678 can prohibit reading program completely. (Note: PLC only supports 8-bit password.)
- Combined with Coolmay network modules can realize remotely control.
- Supports OEM and ODM.

HMI/PLC All-in-One



134*102*32mm
120*94mm (cut-out size)

EX3G-43H/HB

- 480*272TFT, H series support vertical display
- Max 12DI/12DO, 4AD/2DA
- Optional 2 Rs485 on PLC
- Optional 1 Rs232 on HMI
- Default 2 programming ports on PLC (USB and Rs232 port)
- High speed count: HB series support single phase 6 channel 10KHz or 3 AB 10KHz or 2 ABZ+1 AB 10KHz. H series support single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz
- High speed pulse: 8 channels, HB series supports Y0-Y7 10KHz. H series support Y0-Y3 100KHz, Y4-Y7 10KHz. High-speed counting + high-speed pulse < 480KHz.
- Acceleration and deceleration are independent.

HMI/PLC All-in-One



150*93*32mm
143*86mm (cut-out size)

EX3G-43KH/50KH

- EX3G-43KH: 480*272TFT
- EX3G-50KH: 800*480TFT
- Support vertical display
- Max 12DI/12DO, 4AD/2DA
- Optional 2 Rs485 on PLC
- Optional 1 Rs232 on HMI
- Default 2 programming ports on PLC (USB and Rs232 port)
- High speed count: supports single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz
- High speed pulse: supports 8 channels, Y0-Y3 100KHz, Y4-Y7 10KHz. High-speed counting + high-speed pulse < 480KHz.
- Acceleration and deceleration are independent.

EX3G-70H

- 800*480TFT, supports vertical display
- Max 20DI/18DO, 12AD/8DA or 24DI/20DO(18R2T), 8AD/6DA
- Optional 1 Rs485 or 2 Rs485 (one is changed from defaulted Rs232)/CAN/Network port on PLC
- Optional 1 Rs232 or Rs485/ Network port on HMI
- P.S. The network port can be added either on PLC or HMI. Default 2 programming ports on PLC (Type-C and Rs232 port)
- High speed count: supports single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz
- High speed pulse: supports 8 channels, Y0-Y3 100KHz, Y4-Y7 10KHz. High-speed counting + high-speed pulse < 480KHz. Acceleration and deceleration are independent.



212*148*40mm
194*138mm (cut-out size)

HMI/PLC All-in-One



226*163*35.6mm
217*154mm (cut-out size)

EX3G-70KH

- 800*480TFT, supports vertical display
- Max 30DI/30DO (28R2T), 16AD/8DA
- Optional 1 Rs485 or 2 Rs485 (one is changed from defaulted Rs232)/CAN/Network port/WIFI (occupy default Rs232 port) on PLC
- Optional 1 Rs232 or Rs485/ Network port on HMI
- P.S. The network port can be added either on PLC or HMI.
- Default 2 programming ports on PLC (USB and Rs232 port)
- High speed count: supports single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz
- High speed pulse: supports 8 channels, Y0-Y3 100KHz, Y4-Y7 10KHz.High-speed counting + high-speed pulse < 480KHz.
- Acceleration and deceleration are independent.



275*194*36mm
262*180mm (cut-out size)

EX3G-100HA

- 1024*600TFT
- Max 30DI/30DO (28R2T), 16AD/8DA
- Optional 1 Rs485 or 2 Rs485 (one is changed from defaulted Rs232)/CAN/Network port/WIFI (occupy default Rs232 port) on PLC
- Optional 1 Rs232 or Rs485/ Network port on HMI
- P.S. The network port can be added either on PLC or HMI.
- Default 2 programming ports on PLC (USB and Rs232 port)
- High speed count: supports single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz
- High speed pulse: supports 8 channels, Y0-Y3 100KHz, Y4-Y7 10KHz.High-speed counting + high-speed pulse < 480KHz.
- Acceleration and deceleration are independent.



365*290*36mm
352*279mm (cut-out size)

EX3G-150HA

- 1024*768TFT
- Max 30DI/30DO (28R2T), 16AD/8DA
- Optional 1 Rs485 or 2 Rs485 (one is changed from defaulted Rs232)/CAN/Network port/WIFI (occupy default Rs232 port) on PLC
- Optional 1 Rs232 or Rs485/ Network port on HMI
- P.S. The network port can be added either on PLC or HMI.
- Default 2 programming ports on PLC (USB and Rs232 port)
- High speed count: supports single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz
- High speed pulse: supports 8 channels, Y0-Y3 100KHz, Y4-Y7 10KHz.High-speed counting + high-speed pulse < 480KHz.
- Acceleration and deceleration are independent.

※ Programming software: HMI uses Coolmay HMI software, and PLC is compatible with GX Works 2.
 ※ More details, refer to "COOLMAY EX3G Programming Manual", "EX3G User Manual", "Coolmay HMI User Manual"

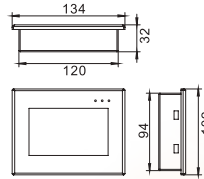
Specifications of EX3G HMI/PLC All-in-One

Model	EX3G-43H/HB	EX3G-43KH/50KH	EX3G-70H	EX3G-70KH	EX3G-100HA	EX3G-150HA
Display panel	4.3" TFT LCD	4.3/5" TFT LCD	7" TFT LCD	7" TFT LCD	10.1" TFT LCD	15" TFT LCD
Resolution	480*272	480*272/800*480	800*480	800*480	1024*600	1024*768
Dimension	134*102*32mm	150*93*32mm	212*148*40mm	226*163*35.6mm	275*194*36mm	365*290*36mm
Cut-out size	120*94mm	143*86mm	194*138mm	217*154mm	262*180mm	352*279mm
Display size	97*56mm	97*56/108*65mm	154*87mm	154*87mm	222*125mm	304*228mm
Brightness	300cd/m ²	300cd/m ²	300cd/m ²	300cd/m ²	300cd/m ²	450cd/m ²
Back light	LED	LED	LED	LED	LED	LED
ROM	128MB	128MB	128MB	128MB	128MB	128MB
RAM	H:64MB/HB:32MB	64MB	64MB	64MB	128MB	128MB
CPU	H:ARM9 400MHz HB:ARM9 216MHz	ARM9 400MHz	ARM9 400MHz	ARM9 400MHz	Cortex A8 720MHz-1GHz	Cortex A8 720MHz-1GHz
Display color scale	65536	65536	65536	65536	65536	65536
Panel	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance
Power consumption	4-6W	4-6/5-7W	6-7W	6-7W	6-8W	15W
Weight	Approx. 0.4kg	Approx. 0.5kg	Approx. 0.64kg	Approx. 0.64kg	Approx. 0.9kg	Approx. 3.42kg
Digital points	12DI/12DO	12DI/12DO	20DI18DO/24DI20DO(18R2T)	24DI20DO/30DI30DO(28R2T)		
DO type	Relay(max load5A)/MOS(max load 2A)		Relay/transistor(Y0-Y3 are MOS)/mixed outputs			
I/O levels	Input: passive NPN, common terminal isolation; output: low-level NPN, COM connected to negative					
High speed count input	HB series support single phase 6 channel 10KHz or 3 AB 10KHz or 2 ABZ+1 AB 10KHz H series support single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz					
High speed pulse output	HB series support 8 channel 10KHz; H series support 8 channels, Y0-Y3 100KHz, Y4-Y7 10KHz. High-speed counting + high-speed pulse < 480KHz. Acceleration and deceleration are independent.					
Analog points	4AD/2DA		12AD8DA/8AD6DA	16AD8DA/5AD2DA		
Analog type	AD type: Type E/I/K/S/T/J thermocouple/ PT100/ PT1000/ NTC10K/ NTC50K/ NTC100K/ 0~10V/ 0~5V(70H/70KH/100HA support -5V~5V/ -10V~10V)/ 0~20mA/ 4~20mA/ mixed DA type: 0~10V/ 0~5V (70H/70KH/100HA support -5V~5V/ -10V~10V)/ 0~20mA/ 4~20mA/ mixed					
Analog accuracy	12 bit					
Default programming port	1 Mini type b USB port (Type C for EX3G-70H) and 1 Rs232 port (can be also used as COM port)					
HMI optional COM port	1 Rs232 port, H/KH can add audio		1 Rs232 or 1 Rs485, Ethernet port (cannot coexist with that of plc)/audio			
PLC optional COM port	2 Rs485		1 Rs485 or 2 Rs485 (one is changed from the default Rs232), CAN (2.0A/B), Ethernet port (can not coexist with HMI Ethernet port), WIFI (will occupy the default Rs232)			
Input	DC24V					
Certificate	CE					
Anti-interference test	Voltage 1500Vp-p, pulse period 1μs, last 1s					
Shock test	10-25Hz (X/Y/Z 2G 30mins)					
Working ambient temp	0 ~ 50°C					
Working ambient humidity	20% ~ 90%RH					
Storage	-20 ~ 70°C					
Cooling	Natural air cooling					

Dimensions

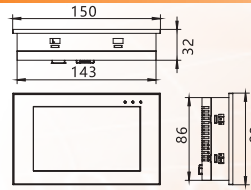
EX3G-43H/HB

Cut-out size: 120*94mm



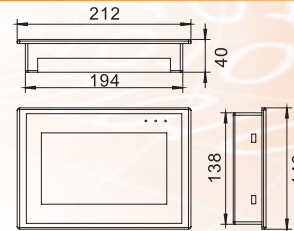
EX3G-43(50)KH

Cut-out size: 143*86mm



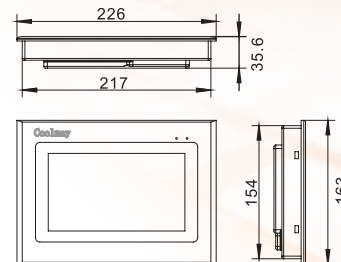
EX3G-70H

Cut-out size: 194*138mm



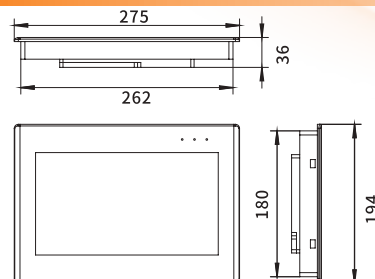
EX3G-70KH

Cut-out size: 217*154mm



EX3G-100HA

Cut-out size: 262*180mm



Programmable Logic Controller (PLC)

Coolmay PLC applies military-grade chip, faster operating speed and strong anti jamming capability. The inputs and outputs apply opto-isolator. Analog i/o, RS232 and RS485 are integrated. It is a new control concept in functions, cost-saving and conveniences.

Features

- Integrated PLC with digital i/o (DI/DO), analog i/o (AD/DA), high speed functions, etc..
- Compatible with FX3G/FX3U/FX3S PLC, fast operation.
- Up to 40DI/40DO, 16AD/8DA.
- Default 1 Mini type B USB port, 1 Rs232 (Interface terminal is mouse female port with 8 holes), 2 RS485 ports Supports optional Rs232 communication port, and supports Mitsubishi PLC programming protocol, serial port protocol and Modbus protocol. Supports CAN.
- Some models support Ethernet port. Supports multiple HMI and VFD communication.
- Supports multi-channel high speed count and pulse functions.
- 32,000-step program capacity and 32,000 power retentive registers. Supports interruption, linear arc interpolation and PID self-tuning.
- Supports special encryption. HMI and PLC can be encrypted respectively. Set PLC password as 12345678 can prohibit reading program completely. (Note: PLC only supports 8-bit password.)
- Combined with Coolmay network modules can realize remotely control.
- Supports OEM and ODM.

CX3G-16M(-485/232)



65*90*36mm
Mounting size: 57*99mm

- Supports 8DI/8DO
- Default as 2 RS485 ports, and can be customized as 1 RS485, 1 RS232, or 1 RS485, 1 CAN (2.0A/B), or 1 RS232, 1 CAN (2.0A/B)
- High speed pulse Y0-Y7 10KHz
- High speed count+high speed pulse ≤480KHz

CX3G-24M(-6AD4DA-485/232)

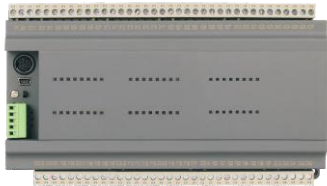
CX3G-32M(-2AD-485/232)



130*90*36mm
Mounting size: 122*99mm

- CX3G-24M supports 12DI/12DO, 6AD/4DA
- CX3G-32M supports 16DI/16DO, 2AD
- Default as 2 RS485 ports, and can be customized as 1 RS485, 1 RS232, or 1 RS485, 1 CAN (2.0A/B), or 1 RS232, 1 CAN (2.0A/B)
- High speed pulse Y0-Y3 100KHz, Y4-Y7 10KHz
- High speed count+high speed pulse ≤480KHz

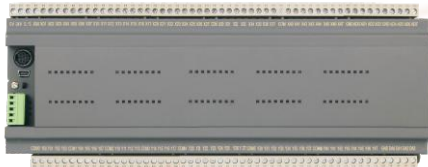
CX3G PLC



200*90*36mm
192*99mm

CX3G-34M(-12AD8DA-485/232) CX3G-48M(-8AD4DA-485/232)

- CX3G-34M supports 18DI/16DO, 12AD/8DA
CX3G-48M supports 24DI/24DO, 8AD/4DA
- CX3G-34M is default as 2 Rs485 ports and can be customized as 1 RS485, 1 RS232. CAN(2.0A/B) port is optional
- CX3G-48M is default as 2 Rs485 ports and can be customized as 1 RS485, 1 RS232, or 1 RS485, 1 CAN (2.0A/B), or 1 RS232, 1 CAN (2.0A/B)
- CX3G-48M can add Ethernet port and supports Modbus TCP/UDP protocol.
- High speed pulse Y0-Y3 100KHz, Y4-Y7 10KHz
- High speed count+high speed pulse ≤480KHz



285*90*36mm
277*99mm

CX3G-64M(-16AD8DA-485/232) CX3G-80M(-4AD4DA-485/232)

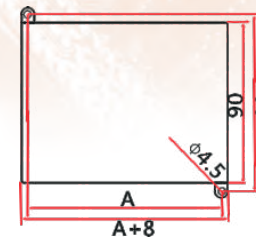
- CX3G-64M supports 32DI/32DO, 16AD/8DA
- CX3G-80M supports 40DI/40DO, 4AD/4DA
- Default as 2 RS485 ports and can be customized as 1 RS485, 1 RS232, CAN (2.0A/B) port is optional
- High speed pulse Y0-Y3 100KHz, Y4-Y7 10KHz
- High speed count+high speed pulse ≤480KHz

※ Programming software: compatible with GX Works 2
 ※ More details, please refer to "Coolmay CX3G/FX3GC PLC Programming Manual", "CX3G PLC User Manual".

Mounting Size of CX3G PLC

Model	CX3G-16M	CX3G-24M	CX3G-32M	CX3G-48M	CX3G-34M	CX3G-64M	CX3G-80M
Dimension	65*90*36mm	130*90*36mm		200*90*36mm	290*90*36mm		
Mounting size	57*99mm	122*99mm		192*99mm	277*99mm		
Installation method	Fixed hole mounting and 35mm standard rail mounting						
Digital points	8DI/8DO	12DO/12DO	16DI/16DO	24DI/24DO	18DI/16DO	32DI/32DO	40DI/40DO
I/O level	Input: Passive NPN, public terminal isolated Transistor output: NPN; Relay output: Normally open dry contact						
DO type	Relay(max load 5A)/ Transistor(max load 500mA)/Mixed						
High speed input	Single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz						
High speed output	8 channels 10KHz	8 channels, Y0-Y3 is 100KHz, Y4-Y7 is 10KHz					
Analog	Null	AD type: Type E/K/S/T/J thermocouple/ PT100/ PT1000/ NTC10K/ NTC50K/ NTC100K/0~10V/ 0~5V/ 0~20mA/ 4~20mA/ -5V~5V/ -10V~10V DA type: 0~10V/ 0~5V/ 0~20mA/ 4~20mA-5~5V/ -10~10V (2DA for 1 minus voltage)					
		6AD4DA	2AD	8AD4DA	12AD8DA	16AD8DA	4AD4DA
COM port	1 Mini type B USB port, 1 Rs232(Interface terminal is mouse female port with 8 holes), 2 RS485 ports						
	Default 2 RS485 ports can be customized as 1 RS485, 1 RS232, or 1 RS485, 1 CAN (2.0A/B), or 1 RS232, 1 CAN (2.0A/B) CX3G-48M can add Ethernet port.				Default 2 RS485 ports can be customized as 1 RS485, 1 RS232, CAN (2.0A/B) port is optional		
*CX3G-24M also supports 10DI/12DO, 8AD. *CX3G-32M also supports 16DI/14DO, 2AD2DA.							

CX3G PLC Mounting Size



Cut-out size: A*99
Dimension: (A+8)*90mm

CX3G-16M A:57mm
 CX3G-32/24M A:122
 CX3G-48/34M A:192mm
 CX3G-64M/80M A:277mm

FX3GC PLC (Standard Plastic Case)

FX3GC is a compact PLC with features below.

1. Highly integrated. Supports 16DI/16DO, 8AD/6DA.
2. Default 2 PLC programming ports: Mini Type B USB (faster reading speed) and Rs422 port.
3. Supports multiple high-speed counting and high-speed pulse.
 - High-speed counting: single phase 6x 60KHz or AB (Z) 2x 60KHz, 1x 10KHz.
 - High-speed pulse: 8 channels, Y0-Y3 is 100KHz, Y4-Y7 is 10KHz.
 - Acceleration and deceleration are independent.
 - High speed count + high speed pulse ≤ 480KHz.
4. 32K steps program capacity, 32K power retentive registers. Supports interrupt, linear circular interpolation, PID auto-tuning.
5. Special encryption. Set password as 12345678 to prevent reading data completely.
6. Convenient wiring. 3.5MM pluggable terminals are applied.
7. Easy installation. DIN-Rail (35 mm width) installation is applied.
8. More specifications can be customized.



Dimension: 90*60*32mm

FX3GC-16M

- 8DI/8DO
- Optional RS485, CAN, analog extension modules
- ※ Supports 2 RS485, 1 CAN, 6AD/4DA
Or 1 RS485, 1 CAN, 8AD/4DA
Or 1 RS485 8AD/6DA
Or 2 RS485, 1 CAN



Dimension: 90*60*32mm

Type A: FX3GC-32M Type B: FX3GC-30M(-485)

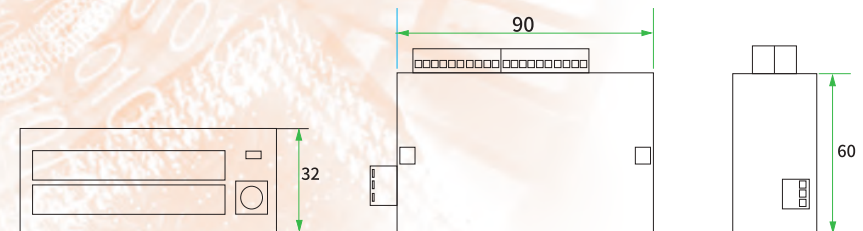
- Type A: 16DI/16DO
- Type B: 16DI/14DO, optional 1 Rs485

※ Programming software: compatible with GX Works 2
More details, please refer to "Coolmay CX3G/FX3GC PLC Programming Manual", "FX3GC PLC User Manual".

Specifications of FX3GC PLC

Model	FX3GC-16M	FX3GC-30M	FX3GC-32M
Dimension	90*60*32mm		
Installation method	DIN rail (35mm width)		
Digital points	8DI/8DO	16DI/14DO	16DI/16DO
I/O level	Input: Passive NPN, public terminal isolated Transistor Output: low level NPN, COM connects to cathode; Relay output: Normally open dry contact		
DO type	Relay(MR)/ Transistor (MT)/ Mixed (MRT) (Relay output: max load 5A/ transistor output: max load 500mA)		
High speed count	Single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz		
High speed pulse	8 channels, Y0-Y3 is 100KHz, Y4-Y7 is 10KHz High-speed counting + high-speed pulse < 480KHz		
Analog	AD: Type E/K/S/T/J thermocouple/ Pt100 /PT1000/ NTC10K/ NTC50K/ NTC100K/ 0-10V/ 0-5V/ 0-20mA/ 4-20mA/ -5V-5V/ -10V-10V/ mixed	Null	
COM port	Default 2 PLC programming ports: 1 Mini type B USB port, and 1 Rs422 (Interface terminal is 8 holes mouse female port) Optional 2 RS485, 1 CAN(2.0A/B)	Optional 1 RS485	Null
FX3GC-16M supports 2 RS485, 1 CAN(2.0A/B), 6AD4DA or 1 RS485, 1 CAN(2.0A/B), 8AD4DA or 1 RS485, 8AD/6DA or 2 RS485, 1 CAN(2.0A/B)			

Mounting Size of FX3GC PLC



Dimension: 90*60*32 mm

Coolmay PLC Parameters

Model		EX3G/ CX3G/ FX3GC
Computing control method		Cyclic scanning through stored programs
I / O control method		Batch processing, input and output refresh, pulse capture
Programming language		Logic ladder diagram and instruction table (supports Mitsubishi software programming)
Computing time	Basic	Approx. 0.42μs
	Application instructions	Approx. 1.6μs
RAM	Built-in	32,000 steps
	External storage	Null
Instructions	Basic sequence instructions	27
	Step ladder instructions	2
	Application instructions	199 (Support majority, seen the instruction comparison table)
Auxiliary	General	384 points M0-M383, 6144 points M1536-M7679
	Power retentive	1152 points M384-M1535
	Special	512 points M8000-M8511
Status	General	3096 points S1000-S4095
	Initial	10 points S000-S009
	Power retentive	990 points S010-S999
Timer	100ms	200 points T0-T199
	10ms	46 points T200-T245
	1ms	4 points T246-249 power retentive, T256-T319 64 points general
	100ms power retentive	6 points T250-T255
Counter	General 16 bits	16 points C0-C15
	Power retentive 16 bits	184 points C16-C199
	General 32 bits	20 points C200-C219
	Power retentive 32 bits	15 points C220-C234
High speed counter	Single phase single count	C235-C245, max 6 channels, max 60KHz
	Single-phase start-stop input	
	Single-phase double counting	C246-C250, max 2 channels, max 60KHz
Data register	Biphase double counting	C251-C255, max 3 channels, 2 octave max 60KHz; 4 octave max 24KHz
	General	128 points, D0-D127
Data register	Power retentive	7872 points, D128-D7999
	File register	24000 points, R0-R23999 support power retentive
	Special	512 points, D8000-D8511
	Indexing	16 point, V0-V7, Z0-Z7
pointer	JUMP CALL	256 points, P0-P255 / 1281 points, P0-P1280
	Interruption	Input interruption 6 points I0~I5; timer interruption 3 points T6~T8; counter interruption 6 points C10~C16
Nesting	master control	8 points, N0-N7
Constant	Decimal K	16 bits: -32768~32767
		32 bits: -2147483648~2147483647
	Hex H	16 bits: 0000~FFFF 32 bits: 00000000~FFFFFFFF

Human Machine Interface (HMI)

H series are based on WINCE 5.0, and HA series are based on WINCE 7.0.

Features

- Provides a large number of vector libraries and supports self-built gallery
- High-precision, high-reliability resistive touch panel
- Supports various formats of static images and GIF animations
- Support all fonts WINDOWS provided
- 60,000 TFT true color display
- H series support vertical display
- Support Ethernet port and audio
- Default Rs232/Rs485 port, support multiple protocols
- Support 18 languages
- Support data storage functions and default as usb flash drive storage, and SD card storage is optional (cannot coexist with usb storage), max. 100,000 data.
- Supports storage of recipe, historical data, curves, alarming listing.
- Support Ethernet port and support Ethernet monitoring
- Support program download, database upload and download by usb flash drive or SD card, and support functions of external mouse, usb flash drive.

HMI MT60



MT6037H

- ※ Programming software: Coolmay HMI programming software
- ※ More details, please refer to "Coolmay HMI User Manual", "Coolmay HMI Programming Manual".

HMI MT60



MT6050H



MT6043H



MT6070H



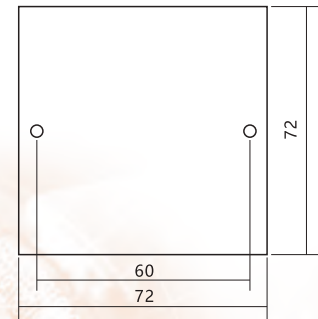
MT6100HA



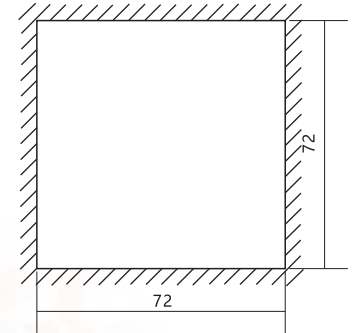
MT6150HA

Dimensions of MT60

■ MT6037H (mm)



Wall mounting

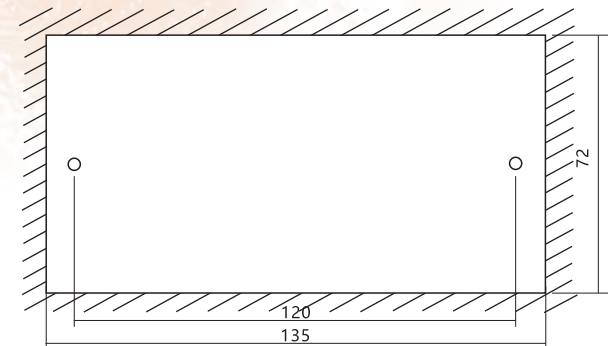


Inlay mounting

■ MT6050H (mm)



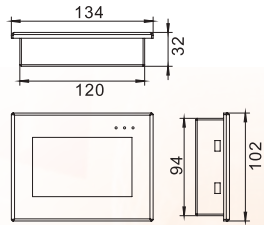
Wall mounting



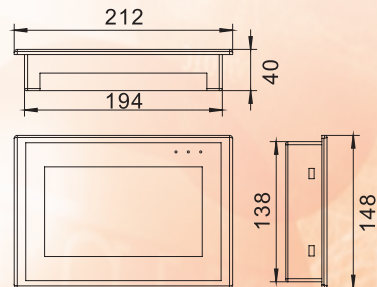
Inlay mounting

Dimensions of MT60

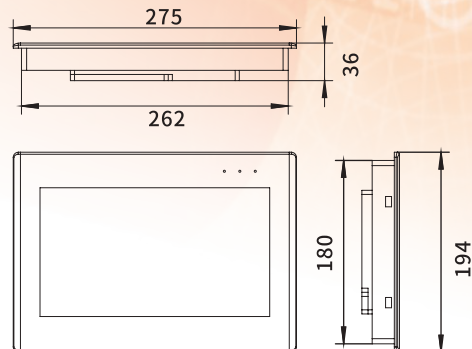
- **MT6043H**
Cut-out size: 120*94mm



- **MT6070H**
Cut-out size: 194*138mm



- **MT6100HA**
Cut-out size: 262*180mm



HMI MT90

Differences from MT60 HMI

1. No operation system and no startup screen, fast startup speed
2. Support Chinese and English only.
3. Support 30,000 data storage.
4. Support CAN (cannot coexist with default Rs485 port).



MT9037H



MT9043KH/MT9050KH

MT9070KH

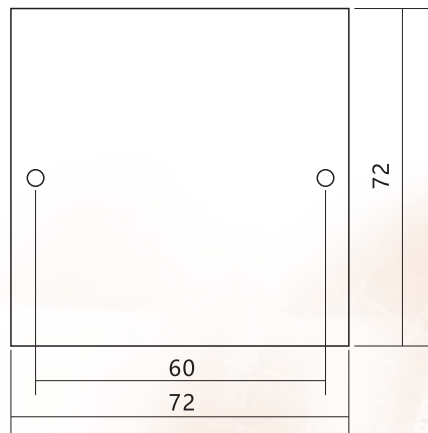
- Provides a large number of vector libraries and supports self-built gallery
- High-precision, high-reliability resistive touch panel
- Supports various formats of static images and GIF animations
- Support all fonts WINDOWS provided
- 60,000 TFT true color display
- MT9043KH/MT9050KH/MT9070KH support CAN port
- Default Rs232/Rs485 port, support multiple protocols
- Supports storage of recipe, historical data, curves, alarming listing.

※ Programming software: Coolmay HMI programming software

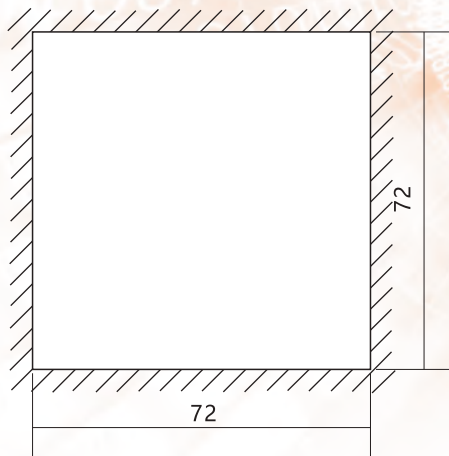
※ More details, please refer to "Coolmay HMI User Manual", "Coolmay HMI Programming Manual".

Dimensions of MT90

■ MT9037H (mm)



Wall mounting

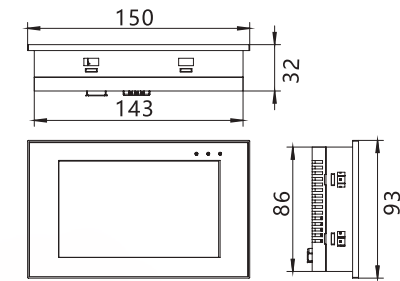


Inlay mounting

Dimensions of MT90

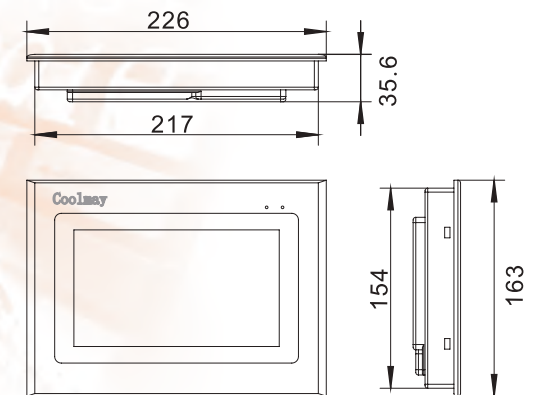
■ MT9043KH MT9050KH

Cut-out size: 143*86mm



■ MT9070KH

Cut-out size: 217*154mm



Specifications of HMI

Model	MT6037H/MT9037H	MT6043H	MT6050H	MT6070H(A)	MT6100HA	MT6150HA	MT9043(50)KH	MT9070KH
Display panel	3.5" TFT LCD	4.3" TFT LCD	5.0" TFT LCD	7.0" TFT LCD	10.1" TFT LCD	15.0" TFT LCD	4.3/5.0" TFT LCD	7.0" TFT LCD
Resolution	320*240	480*272	800*480	800*480/1024*600	1024*600	1024*768	480*272/800*480	800*480
Dimension(mm)	88*88*25	134*102*32	146*88*25	212*148*40	275*194*36	365*290*36	150*93*32	226*163*35.6
Cut-out size	72*72mm	120*94mm	137*72mm	194*138mm	262*180mm	352*279mm	143*86mm	217*154mm
Display size	73*56mm	97*56mm	108*65mm	154*87mm	222*125mm	304*228mm	97*56/108*65mm	154*87mm
Brightness	300cd/m ²	300cd/m ²	300cd/m ²	300cd/m ²	300cd/m ²	450cd/m ²	300cd/m ²	300cd/m ²
Back light	LED	LED	LED	LED	LED	LED	LED	LED
ROM	128MB	128MB	128MB	128MB	128MB	128MB	128MB	128MB
Display color scale	65536	65536	65536	65536	65536	65536	65536	65536
Panel	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance	4-wire resistance
Power consumption	<3W	<3W	<5W	<5W	<8W	<12W	<3W	<8W
Weight	0.3kg	0.33kg	0.33kg	0.54kg	0.7kg	3.414kg	0.33kg	0.7kg
COM port	Default 1 Rs232, 1 Rs485. MT60 supports Ethernet port. MT6***H can add audio.						Default 1 Rs232, 1 Rs485. Support CAN port.	
ROM	H series: 64MB. HA series: 128MB. MT9037H: 32MB						32MB	64MB
CPU	H series: ARM9 400MHz. HA series: Cortex A8 720MHz-1GHz. MT9037H: ARM9 216MHz						ARM9 216MHz	ARM9 288MHz
Operating system	H series: WINCE 5.0. HA series: WINCE 7.0. MT9037H: Null						Null	
Contrast	400:1							
Power retentive	Within 20ms							
USB port	Yes but expect for MT90 series HMI							
System diagnostics	Power failure detection							
Input	12-24VDC ± 10% < 150mA @ 24VDC						15-24VDC ± 10% < 300mA @ 24VDC	12-24VDC ± 10% < 150mA @ 24VDC
Certificate	CE							
FCC	Conform to FCC Class A							
Anti-interference test	Voltage 1500Vp-p, pulse period 1μs, last 1s							
Shock test	10-25Hz(X,Y,Z 2G 30 mins)							
Insulation resistance	>10MΩ @ 500VDC							
House material	ABS+PC							
Pressure test	500VAC 1min							
IP level	IP65(front panel)							
Working ambient temp.	0~50°C							
Working ambient humidity	20~90%RH							
Storage	-20~70°C							
Cooling	Natural air cooling							

Power supply



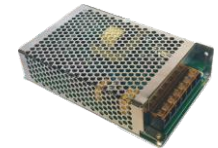
CM6024
90*60*32mm



CX6024-12-5
85*90*36mm



CX2024
65*90*36mm



CM15024
159*97*38mm

CM industrial power supply applied imported power supply special driving chip and high precision and high temperature resistant electronic components, and adopts international advanced pulse width modulation (PWM) technology. It has protection for short circuit, overload, overvoltage, overheating.

- Advanced PWM technology
- Adopts imported driver chip
- Soft-start current, effectively reduce transient voltage surge
- Adopts high temperature electrolytic capacitors to ensure system reliability
- 120% full-load aging test, strong output
- Built-in EMI, filter, minimal ripple and noise
- Short circuit, overload, over-voltage protections
- Natural heat dissipation, stable performance and high reliability
- MTBF of 100,000 hours

Specifications of Power Supplies

Model	CX6024-12-5	CX2024	CM6024	CM15024
Dimension	85*90*36mm	65*90*36mm	90*60*32mm	159*97*38mm
Wiring method	7.62 fence terminal	7.62 fence terminal	5P-7.62 fence terminal	7P-9.5 fence terminal
Output	1A	0.8A	2.5A	6.5A
Efficiency	86%	85%	86%	89%
Installation	Standard rail mounting, can be mounted on NS35 \ 7.5 or NS35 guide slot			Screwed, flat or 90 degree installation
Electric shock	30A/230V AC			60A/230V AC
Input frequency	47~63Hz			
Input voltage	88~264V AC/125~373V DC			
Output voltage	DC24V/DC12V/DC5V	DC24V		
Output accuracy	± 1%			
No-load consumption	<0.5W			
Protection	Short circuit / overvoltage protection			
Abnormal alarm	When the fault occurs, the LED light flashes or is off			
Life span	100,000 hours at room temperature 25 °C			

Network / Radio Frequency (RF) Module



CM-WIFI

90*60*32mm

Optional rechargeable lithium battery



CM-RFM

90*60*32mm

Optional rechargeable lithium battery



CM-GPRS

90*60*32mm

Optional rechargeable lithium battery
(Optional three-meter sucker antenna /
rod antenna optional)



CX-GPRS-G

65*90*36mm

Supports GPS
Optional rechargeable lithium battery
(Optional three-meter sucker antenna /
rod antenna optional)



CX-WIFI-2NET

65*90*36mm

Optional rechargeable lithium battery



CX-4G

65*90*36mm

Optional rechargeable lithium battery

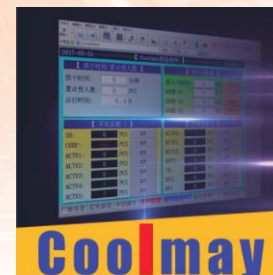
Network / RF Module

CM-WIFI/GPRS/RFM/CX-4G/WIFI-2NET modules are small and powerful network modules developed and produced by Shenzhen Coolmay Technology Co., Ltd. It realizes transparent transmission of network data packets and Rs232/ Rs485 interface data.

- Optional rechargeable lithium battery, and the model will be added with L. E.g., CM-WIFI with battery, the model will be CM-WIFI-L.
- **CM-WIFI:** 300MW transmitting power, easily cover 100 meters on-site, wireless programming/ debugging/ monitoring can be realized in any corner.
- **CX-WIFI-2NET:** Default two RJ45 standard network ports. Traditional low-end serial devices or MCU-controlled devices can be easily connected to Wi-Fi or Ethernet for transparent transmission, thereby achieving IoT network control and management. As a hotspot, the module can accommodate 32 wifi or TCP clients at the same time. And the module can be also used as a secondary router, and can realize hand-in-hand Ethernet connection.
- **CM-GPRS:** The four-frequency module is universal. Supports Mobile/ Unicom GPRS 2G network, and uses MICRO SIM card. Supports remote programming/ debugging/ monitoring, and supports SMS data sending and receiving.
- **CX-GPRS-G:** The four-frequency module is universal. Supports Mobile/ Unicom GPRS 2G network, and uses MICRO SIM card. Supports remote programming/ debugging/ monitoring, and supports SMS data sending and receiving. Supports GPS function.
- **CX-4G:** 5-mode 12-frequency, Mobile/ Unicom/ Telecom 4G high-speed access. Supports Mobile/ Unicom 3G and 2G access, and uses MICRO SIM card. Supports remote programming/ debugging/ monitoring.
- **CM-RFM Radio Frequency Module:** Highly integrated half-duplex micro-power wireless data high-performance RF module, serial devices can easily achieve communication with multiple serial devices/ computers (upper computers) over long distances.
- Completely replaces the wired cable, and can realize the communication between serial device (PLC/ HMI/ instrument, etc.) and computer (upper computer) or serial device.
- Easily remote control serial devices (PLC/ HMI/ instruments, etc.), eliminating business trips.
- This product is more convenient to use with Coolmay PLC or HMI/PLC all-in-one.

Coolmay Configuration Software

1. Suitable for small and medium-sized systems with less than 2 stations, cost-effective.
2. It is a software which based on Windows platform for writing touch screen programs and generating PC monitoring system. The software online simulation function can completely replace the touch screen and directly communicate with the PLC, and can realize all the functions that the touch screen communicates with PLC.



Network / RF Module

Specifications of Network Modules

Model	CM-WIFI	CX-WIFI-2NET
Frequency range	2.412GHz-2.484GHz	2.412GHz-2.484GHz
Network standard	802.11 b/g/n	802.11 b/g/n
Serial speed	300bps~460800bps	300bps~460800bps Ethernet: 100Mbps
Network type	STA/AP/STA+AP	Station/AP mode
Network protocol	IPV4, TCP/UDP/HTTP	TCP/UDP/ARP/ICMP DHCP/DNS/HTTP
Transmit power	802.11b: +16 +/-2dBm 802.11g: +14 +/-2dBm 802.11n: +13 +/-2dBm	802.11b: +20dBm(Max.) 802.11g: +18dBm(Max.) 802.11n: +15dBm(Max.)
User configuration	Built-in web/ serial AT command	Built-in web/ serial AT command
Interface type	SMA interface	SMA interface / RJ45 standard
Wiring method	Power supply applies 3.50 pluggable terminals or optional MICRO USB power supply/rechargeable lithium battery Rs485 applies 3.81 pluggable terminals	Power supply applies 5.0 pluggable terminals or optional MICRO USB power supply/rechargeable lithium battery Rs485 applies 3.50 pluggable terminals
Dimension	90*60*32mm	65*90*36mm
Data interface	Rs232, Rs485	
Installation	Standard rail mounting, and can be mounted on NS35\7.5 or NS35 slot.	
Working voltage	DC5V ~DC30V	

Note: Either power terminal of the power supply or USB power supply can be selected. If lithium battery, only MICRO USB power supply can be used.

Specifications of Network and RF Modules

Model	CM-GPRS	CX-4G	Model	CM-RFM
Frequency range	850/900/1800/1900MHz quad-band	5 mode 12 frequency	Frequency range	430-450MHz
Network standard	GSM/GPRS/EDGE	TDD-LTE/FDD-LTE WCDMA/ TD-SCDMA GSM/GPRS/EDGE	Modulation	GFSK
Serial speed	2400bps~921600bps	300bps~230400bps	Serial speed	1200bps~115200bps
Network type	GSM/GPRS/EDGE	TDD-LTE/FDD-LTE WCDMA/ TD-SCDMA GSM/GPRS/EDGE	Channel spacing	150KHz
Network protocol	TCP/UDP/DNS/HTTP	TCP/UDP/DNS/HTTP	Transmission rate	1-100Kbps
Transmit power	GSM900 class4(2W) DCS1800 class1(1W)	TDD-LTE +23dBm(Power class 3) FDD-LTE +23dBm(Power class 3) WCDMA +23dBm(Power class 3) TD-SCDMA +24dBm(Power class 2) GSMBand8 +33dBm(Power class 4) GSMBand3 +30dBm(Power class 1)	Transmit power	Max 20dBm(100mw) Adjustable 9-level power
User configuration	Serial/ Network/ SMS AT Command (Provide Software)	Serial/ Network/ SMS AT Command (Provide Software)	Receiving sensitivity	-114dBm(@10Kbps, dev=25KHz,BER<0.1%)
Interface type	SMA interface	SMA interface	Cache space	双256bytes
Wiring method	Power supply applies 3.50 pluggable terminals or optional MICRO USB power supply/rechargeable lithium battery Rs485 applies 3.81 pluggable terminals	Power supply applies 5.0 pluggable terminals or optional MICRO USB power supply/rechargeable lithium battery Rs485 applies 3.50 pluggable terminals	Wiring method	Power supply applies 3.50 pluggable terminals or optional MICRO USB power supply/rechargeable lithium battery Rs485 applies 3.81 pluggable terminals
Dimension	90*60*32mm	65*90*36mm	Dimension	90*60*32mm
Data interface	RS232,RS485			
Installation	Standard rail mounting, and can be mounted on NS35\7.5 or NS35 slot.			
Working voltage	DC5V ~DC30V			

Note: Either power terminal of the power supply or USB power supply can be selected. If lithium battery, only MICRO USB power supply can be used.

Offline Programming (OP)/ Fiber Conversion Modules



CM-OP
Offline programming module
90*60*32mm
Default rechargeable lithium battery



CX-FIBER-A/CX-FIBER-B
Fiber to CAN/RS485/RS232
65*90*36mm

- **CM-OP:** The PLC's exclusive programming module. It can download or read the programs in the PLC without connecting the PLC to the computer, which greatly improves the download efficiency and facilitates engineers to download programs in batches.
- **CX-FIBER-A/CX-FIBER-B Fiber to CAN/RS485/RS232 Modules:** Integrated 2 CAN buses, 1 RS485 and 1 RS232 (Rs485 and Rs232 cannot be used at the same time), which can realize long-distance communication, data transmission and program download of serial devices (PLC/ HMI/ meter/ upper computer, etc.).

Model	CM-OP
Installation	35mm standard rail mounting, handheld devices
Connection method	MICRO USB & RS485/ RS432
COM protocol	Mitsubishi programming port protocol
Power supply	Built-in 2000mAH lithium battery
Charging voltage	5V
Max input	50mA
Static power consumption	<0.5W
N.W.	50g
Dimension	90*60*32mm
Working ambient temp.	-20°C~85°C
Programming software	GX Works 2

Model	CX-FIBER-A/CX-FIBER-B
Max fiber length	80km
Data interface	2 CAN, 1 Rs232 or 1 Rs485
Baud rate	0~1Mbps
Optical port selection	ST, SC or FC interface single or double fiber
Input	DC24V
N.W.	100g
Dimension	65*90*36mm
Cut-out size	98*57mm
Working ambient temp	-40°C~85°C
Relative humidity	≤95%RH
Installation	Rail, wall mount, flat mount
Usage	Plug and play

Temperature Control Module



Dimension: 90*60*32mm

CM-4TMS/4TMR

- 4 PID with independent chips
- 4 16-bit high-precision temperature control module with isolation
- Supports multiple 4-channel thermocouples / thermal resistors
- 4TMS is 4 SSR outputs / 4TMR is 4 relay outputs
- Temperature range: -200.0 °C~ 1350.0 °C
- 2 RS485 communication

Amplification Modules



Transistor Amplification module
CM-MOS



Solid State Relay Amplifier Module
CM-SSR



Intermediate Relay Amplification Module
CM-REY

Coolmay Amplifier Modules convert low-power output signal of PLC to high-power signal output through the optocoupler isolation (intermediate relay amplification module applies relay isolation), and control motor, solenoid valve and other high-power loads to protect PLC.

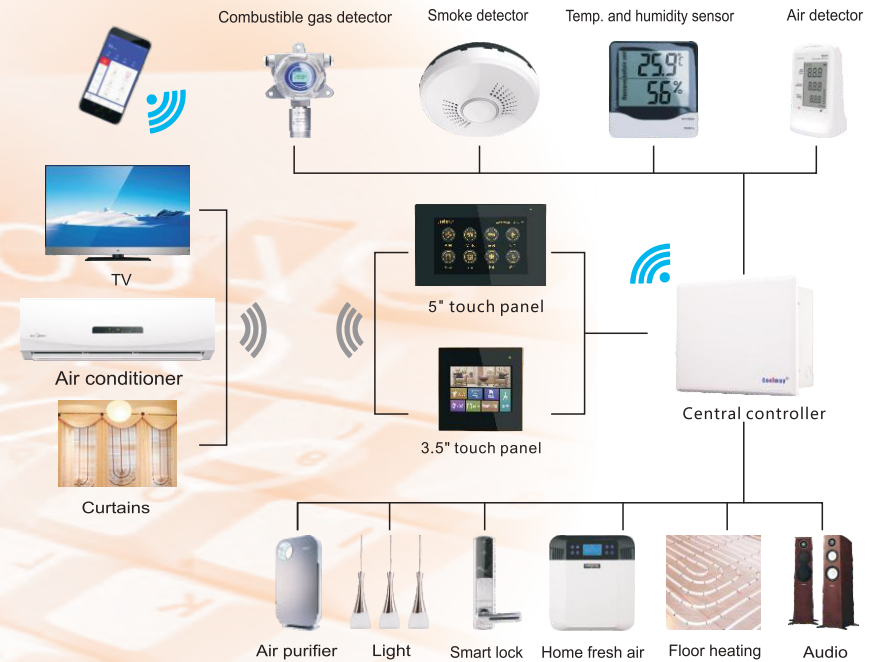
- With opto-isolator (intermediate relay amplification module applies relay isolation) to isolate and protect PLC output contacts
- Compact and easy to install and reduces the size of the control box for cost saving
- Input with indicator light, good for debugging
- Standard rail installation
- Inputs and outputs are side arrangement, pluggable terminals for easy wiring and installation
- Small and exquisite appearance
- Stable performance, durability, strong anti-interference ability
- Large output current

Specifications of Amplification Modules

Product type	Transistor amplification module	Solid State Relay Amplifier Module	Intermediate relay amplification module
Model	CM-MOS	CM-SSR	CM-REY
Voltage	DC12~30V	AC100-250V	DC/AC0-250V
Output current	5A	5A	15A
Max output current	10A	10A	16A
Output method	High-power MOS tube, NPN output	Zero crossing trigger	Relay contact
Protection method	Opto-isolated, freewheeling diode protection	Opto-isolated, RC absorption circuit	Relay isolation, 400V varistors
Input voltage	DC24V		
Input drive	NPN (low level input)		
Output points	6 points		
Wiring method	5.08Pluggable terminal		
Installation	Standard rail mounting on NS35/7.5 or NS35 guides		
Dimension	89.5*79*32.5mm		

Home Automation

Coolmay specializes in developing and manufacturing innovative automation products, and provides high-tech control solutions for intelligent buildings and home automation. The solutions combined wired and wireless products, which can easily control various devices and system in the markets, making home automation customization possible.



Topology diagram



Home Automation Products



Dimension:
MAY3S: 96*96*40.4mm
MAY3C: 94*94*40.5mm
Cutout size: 70*70mm
Display size: 73*56mm

Smart Panel MAY3S (resistance)/ MAY3C (capacitive)

1. 60,000 color scale 3.5" TFT HD Screen, 320*240 resolution.
2. 86 bottom case installation.
3. Supports 4 SSR outputs and max 10A, 5A each channel. Can directly control lights by replacing traditional wall switch.
4. Supports external infrared modules, smog sensor, temperature and humidity modules, etc.. Supports various wireless devices connection.
5. Supports MODBUS, CANBUS protocol and supports internal networking.
6. Supports online programming and various scenarios modes. Supports user-defined functions.

Smart Panel MAY5S (resistance)/ MAY5C (capacitive)

1. 60,000 color scale 5" TFT HD Screen, 800*480 resolution.
2. T144 bottom case installation.
3. Supports 8 SSR outputs and max 10A, 5A each channel. Can directly control lights by replacing traditional wall switch.
4. Supports external infrared modules, smog sensor, temperature and humidity modules, etc.. Supports various wireless devices connection.
5. Supports MODBUS, CANBUS protocol and supports internal networking. Optional WIFI function.
6. Supports online programming and various scenarios modes. Supports user-defined functions.



Dimension:
MAY5S: 154*96*40.5mm
MAY5C: 152*94*40.5mm
Cutout size: 134*70mm
Display size: 108*65mm

Smart Control Center

1. Four-channel dimming modules applied cutting-edge directional dimming technology, which allows direct access to halogen lamps, incandescent lamps, or other fixtures with AC220 dimming interface.
2. Four-channel 16A relay with the abilities of high on-off and inrush currents, which perfectly supports the control of energy-saving luminaires.
3. The 16-channel weak-current wiring module can be easily connected to the reset switch, such as infrared sensors, door magnets, emergency buttons, etc. which ensures the system's scalability.
4. Supports WIFI function. 300MW transmission power easily covers 100 meters, and wireless access is possible anywhere.
5. Supports CANBUS, MODBUS, TCP/IP. Easy networking. Supports APP control and remote control functions.
6. Simple and durable box design. Can connect with the external wiring pipelines seamlessly, and the dedicated design of internal line interface is available to those who have no engineering knowledge.
7. Supports ladder online editing, and professional users can truly realize their own home automation DIY.



Home Automation Products



Infrared forwarding module MIR01

- Integrate infrared learning, sending and temperature measurement
- Can learn 99% TV, air conditioning, audio, VCD infrared remote control in the markets, well-adapted.
- Supports multiple devices control simultaneously.

Model	MIR01
Temperature Range	-20°C~85°C
Temperature measurement accuracy	±0.5°C
Temperature resolution	/
Humidity measurement range	/
Humidity resolution	/
Input voltage	7~30V DC
Max input current	50mA
Static power consumption	<0.5W
Dimension	Diameter 110mm * Thickness 36mm
N.W.	50g
Carrier frequency width	31KHz~80KHz
Relative humidity	95%(No condensation)
Working ambient temp.	-20°C~85°C
Installation	Surface/hanging installation
Connection mode	Rj45 (Power supply/ communication)
Communication protocol	MODBUS RTU

Applications

Temperature Control Freezer and Refrigerator

1. LCD or TFT touch screen display, high precision.
2. Combined 3G series controller with multi-channel type T/K/PT100 probe and flexibly controlled compressor operation.
3. Supports buzzer alarms of compressor units and temperatures. Supports over-temperature alarm record.
4. Supports wireless remotely monitoring and control.



Intelligent Farming Control System

1. LCD or TFT touch screen display.
2. Simple and convenient, operators can operate without training.
3. The built-in clock can be used to set the amount of feed, water, etc. anytime.
4. The remain materials can be displayed, and can be monitored to add material in time.
5. Achieved standardized production of agricultural farming and large-scale operation
6. Greatly reduced labor costs and changed the production methods of the aquaculture industry



Pulse Hot Press Machine

1. Applied to hot press machine (pressing machine), HB welding machine, etc..
2. TFT touch screen display.
3. Can realize 1-2 channels of pulse heating, fast heating to 300 degrees in 3 seconds and constant temperature control.
4. Comes with program, stable control, safe and reliable.
5. Integration, easy maintenance and cost saving.



BGA Rework Station Control System

1. 3G series PLC adopts high-precision type K thermocouple closed-loop control, accuracy $\pm 3^\circ\text{C}$.
2. Realized 6-segment heating and 6-segment constant temperature control through PID, adjustable heating speed.
3. Visually display 6 temperature changes through the curves, and can store 50 sets of temperature curve heating recipes.
4. Temperature parameters are password protected, with multiple security protections such as preventing arbitrary modification.
5. Superior safety protection function, double over-temperature alarm protection when temperature is out of control.



Product Selection List of PLC, HMI and HMI/PLC All-in-One

No	Type	Model	Input	Output	AD	DA	485	422	232	Remark	
01	CX3G Series	CX3G-16M	8	8			2		2	1. Three DO types: MT is transistor output/MR is relay output/MRT is mixed outputs (both relay and transistor). 2. Optional 2/4/8/12/16 analog inputs with optional temperature, current, voltage. Supports mixed analog inputs. 3. Optional 2/4/8 analog outputs with current/voltage. Supports mixed analog outputs. 4. High speed count supports single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz. High speed pulse supports 8 channels, Y0-Y3 is 100KHz, Y4-Y7 is 10KHz. (CX3G-16M supports 8 channels 10KHz). Acceleration and deceleration are independent. High-speed counting + high-speed pulse < 480KHz. 5. PLC COM ports are Rs232 and mini type B USB port and optional Rs232/ Rs485/ CAN. 6. 32,000-step program capacity, 32,000 power retentive registers. Supports interruption, linear circular interpolation and PID self-adjusting.	
02		CX3G-24M	12	12	6	4	2		2		
03		CX3G-32M	16	16	2		2		2		
04		CX3G-34M	18	16	12	8	2		2		
05		CX3G-48M	24	24	8	4	2		2		
06		CX3G-64M	32	32	16	8	2		2		
07		CX3G-80M	40	40	4	4	2		2		
08	FX3GC Series	FX3GC-16M	8	8					1	FX3GC-16M can add COM port, analog extension modules. PLC COM port is default Rs422 and Mini type B USB port, 30M can add RS485	
09		FX3GC-32M	16	16					1		
10		FX3GC-30M	16	14			1	1			
11	HMI	MT6037H		3.5"			1		1	TFT touch panel	
12		MT6043H/MT6043KH		4.3"			1		1		
13		MT6050H/MT6050KH		5"			1		1		
14		MT6070H		7"			1		1		
15		MT6100HA		10.1"			1		1		
16		MT6150HA		15"			1		1		
17		MT9037H		3.5"			1		1		
18		MT9043KH		4.3"			1		1		
19		MT9050KH		5"			1		1		
20		MT9070KH		7"			1		1		
21	HMI/PLC All-in-One	EX3G-43H/HB-24M	12	12	4	2	1		1	1. Three DO types: MT is transistor output/MR is relay output/MRT is mixed outputs (both relay and transistor). 2. Optional 2/4/8/12/16 analog inputs with optional temperature, current, voltage. Supports mixed analog inputs. 3. Optional 2/4/8 analog outputs with current/voltage. Supports mixed analog outputs. 4. High speed count supports single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10 KHz (EX3G-43HB supports single phase 6 channel 10KHz or 3 AB 10KHz or 2 ABZ+1 AB 10KHz). High speed pulse supports 8 channels, Y0-Y3 is 100KHz, Y4-Y7 is 10KHz. (EX3G-43HB supports 8 channel 10KHz). Acceleration and deceleration are independent. High-speed counting + high-speed pulse < 480KHz. 5. PLC COM ports are Rs232 and mini type B USB port and optional Rs232/ Rs485/ CAN/ Ethernet port. 6. 32,000-step program capacity, 32,000 power retentive registers. Supports interruption, linear circular interpolation and PID auto-tuning.	
22		EX3G-43(50)KH-24M	12	12	4	2	1		1		
23		EX3G-70H-24M	12	12	12	8	3		2		
24		EX3G-70H-38M	20	18	12	8	3		2		
25		EX3G-70H-44M	24	20	8	6	3		2		
26		EX3G-70KH/100HA-24M	12	12	16	8	3		2		
27		EX3G-70KH/100HA-44M	24	20	16	8	3		2		
28		EX3G-70KH/100HA-60M	30	30	5	2	3		2		
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※ Version 201912

※ More details, please refer to the latest "Coolmay Catalog".