

Product Catalog

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HMI/PLC all-in-one

QM3G series | MX3G series | EX3G-80 series | EX3U-80 series

QM3G HMI/PLC all-in-one

Image

QM3G-43FH



QM3G-50FH



QM3G-70FH/HD



QM3G-70KFH



QM3G-100FH



Product specifications

Model	QM3G-43FH	QM3G-50FH	QM3G-70FH/HD	QM3G-70KFH	QM3G-100FH
Dimension	134*102*34mm	151*96*36mm	200*146*36mm	226*163*35.6mm	275*194*35.6mm
Cutout size	120*94mm	143*86mm	192*138mm	217*154mm	262*180mm
Input	24VDC				
Power Consumption	4-6W	5-7W	6-7W	6-7W	6-8W
HMI					
Feature	60K colors resistive touch screen, supports portrait display				
Type	4.3*TFT	5*TFT	7.0*TFT	7.0*TFT	10.1*TFT
Display size	97*56mm	108*65mm	154*87mm	154*87mm	222*125mm
Resolution(pixels)	480*272	800*480	800*480	800*480	1024*600
RAM	64MB (Please inquire if requires storing historical data)				
ROM	NOR Flash 8MB		NOR Flash 16MB		
CPU	32bit CPU 408MHz				
COM ports	Type-C HMI download port (can download PLC program through the USB penetrating function), RS232 port			Type-B HMI download port (can download PLC program through the USB penetrating function), RS232	
Software	Coolmay mView HMI Programming Software				
PLC					
I/O level	-Input: Passive NPN, public terminal isolated -Transistor output: Low level NPN, COM connect to negative -Relay output: Normally open dry contact				
DO type and load	-MT: 2A/point, 4A/4 point COM, 5A/12 point COM -MR: 2A/point, 5A/12 point COM		--MT: 2A/point, 4A/4 points COM; MT: 0.5A/point, 0.8A/4 points COM, 1.6A/8 points COM -MR: 2A/point, 4A/4 points COM, 5A/12 points COM.		
High-speed counting	Single phase 6 channel 60KHz, or 2 AB 60KHz + 1 AB 10KHz, or 2 ABZ 60KHz + 1 AB phase 10KHz				
High-speed pulse(Only for MT models)	8 channels, Y0-Y3 is 100KHz, Y4-Y7 is 10KHz. High-speed counting + high-speed pulse < 480KHz				
COM port	1x TYPE-C, 1x RS232, 1x RS485			1x mini USB, 1x RS232, 1x RS485	
Software	Compatible with GX Developer8.86 and GX WORKS 2				

Detailed info. refer to: "Coolmay QM3G-FH All-in-One User Manual", "Coolmay CX3G/FX3GC PLC Programming Manual", "Coolmay TK HMI User Manual"

Optional functions

Product specifications

Model	I/O	Output	AI/AO	AI type	AO type	HMI COM port	PLC COM port					
QM3G-43FH	12/12	MT	2/1 or 4/2(Maximum 3AI if thermocou- ple inputs)	-Thermocouple E/E_/K/K_/S/S_/T/T_/J/J_ / PT100/ PT1000/ NTC10K/ NTC50K/ NTC100K/ -0~10V/ 0~5V -0~20mA/ 4~20mA -Mixed	-0~10V / 0~5V -0~20mA/ 4~20mA Mixed		-2x RS485 (one of which is changed from the default RS232 port) -1x WIFI (occupy default RS232 port)					
QM3G-43FH	12/12	MR					-2x RS485 (one of which is changed from the default RS232 port) -1x WIFI (occupy default RS232 port)					
QM3G-50FH	12/12	MT					-1x Ethernet port					
QM3G-50FH	12/12	MR										
QM3G-70FH	12/12	MT	2/1 or 4/2 or 6/4 or 8/4 or 12/8	-Thermocouple E/E_/K/K_/S/S_/T/T_/J/J_ / PT100/ PT1000/ NTC10K/ NTC50K/ NTC100K/ -0~10V/ 0~5V/ -5V~5V/ -10V~10V -0~20mA/ 4~20mA Mixed	-0~10V / 0~5V/ -5~5V/ -10~10V (2AO for 1 minus voltage) -0~20mA/ 4~20mA -Mixed/	-1x RS485 (occupy default RS232 port)	-2 RS485 COM ports (one of which is changed from the default RS232 port) -1 WIFI (occupy default RS232 port) -1x CAN (2.0A/B) port -1x Ethernet port					
QM3G-70FH	12/12	MR										
QM3G-70FH	24/20	MT										
QM3G-70FH	24/16	MR										
QM3G-70KFH	20/18	MT	2/1 or 4/2 or 6/4 or 8/4 or 12/8 or 16/8									
QM3G-70KFH	20/18	MR										
QM3G-70KFH	30/30	MT	2/1 or 4/2 or 5/2									
QM3G-70KFH	30/26	MR										
QM3G-100FH	30/30	MT										
QM3G-100FH	30/26	MR										
QM3G-100FH	12/12	MR	2/1 or 4/2 or 6/4 or 8/4 or 12/8 or 16/8									
QM3G-100FH	20/18	MT										
QM3G-100FH	20/18	MR										
QM3G-100FH	24/20	MT										
QM3G-100FH	24/20	MR										

MX3G HMI/PLC all-in-one

Image

MX3G-43C



MX3G-70C



MX3G-50C



Product specifications

Model	MX3G-43C-22M		MX3G-70C-48M	MX3G-50C-32M
Dimension	134*102*34mm		210*146*36mm	151*96*36mm
Cutout size	120*94mm		192*138mm	143*86mm
Power Consumption	4-6W		6-7W	5-7W
HMI				
Display	60K colors resistive touch screen, supports portrait display			
Type	4.3" TFT		7.0" TFT	5.0" TFT
Display size	97*56mm		154*87mm	108*65mm
Resolution(pixels)	480*272		800*480	800*480
RAM	64MB			
ROM	NOR Flash 8MB		NOR Flash 16MB	
CPU	32bit CPU 408MHz			
COM ports	Type-C HMI download port (can download PLC program through the USB penetrating function), RS232 port			
Software	TPWorks HMI programming software			
PLC				
I/O	Max 12DI/10DO		Max 24DI/24DO	16DI/16DO
I/O level	--Fixed MT outputs: Y0, Y1 at 43C and Y0-Y13 at 70C, DC24V active NPN outputs -Input: Passive NPN, public terminal isolated -Transistor output: Low level NPN, COM connect to negative Relay output: Normally open dry contact			Fixed MT: Low level NPN, COM negative; Input: passive NPN, common isolated
DO type and load	-Transistor MT/Hybrid Output MRT -The first two Y0-Y1 circuits are fixed to MT, with an output load of 0.1A/point; -MT: 0.5A/point, 0.8A/4 point COM; MR: 2A/point, 4A/4 point COM.		-Transistor MT/Hybrid Output MRT -The first 12 Y0-Y13 circuits are fixed to MT, with an output load of 0.1A/point; -MT: 0.5A/point, 0.8A/4 point COM, 1.6A/8 point COM; MR: 2A/point, 4A/4 point COM, 5A/8 point COM.	Transistor MT output, load 0.2A/point
High-speed counting	Conventional 2-channel single-phase 60KHz+4-channel 10KHz or 1-channel AB (Z) phase 30KHz+1-channel AB (Z) phase 5KHz			
High-speed pulse	MT outputs conventional 4 channels, with Y0-Y1 at 100KHz and Y2-Y3 at 10KHz; The total transmission of high-speed counting and high-speed pulses cannot exceed 300KHz		Conventional 4 channels, Y0-Y1 is 100KHz, Y2-Y3 is 50KHz; The total transmission of high-speed counting and high-speed pulses cannot exceed 300KHz	The conventional 4-way Y0-Y1 is 100KHz, and Y2-Y3 is 10KHz;
Analog	Input	2 voltage channels 0-10V+2 current channels 0-20MA+1 NTC10K		Equipped with 2 voltage channels 0-10V+1 current channel 0-20mA
	Output	1 channel voltage 0-10V+1 channel current 0-20MA output	2 channels of current 0-20MA output	/
	AI/AO	5AD/2DA		3AD
COM port	Equipped with two PLC programming ports (1 TYPE-C, faster download speed; 1 RS232 programming port), 1RS485			
Software	Compatible with PLC programming software GX Developer8.86Q and GX Works2			
Customized (200pcs)	① HMI needs to store historical data and can be customized with ferroelectric materials ② PLC can customize 4-channel EKSTJ thermocouple (supports negative temperature) (Note: Thermocouples cannot coexist with their own current and voltage)		① HMI needs to store historical data and can be customized with ferroelectric materials ② HMI can be customized with RS485 (cannot coexist with built-in RS232) ③ PLC can customize 4-channel EKSTJ thermocouple (supports negative temperature)	① HMI needs to store historical data and can be customized with ferroelectric materials

Detailed info. refer to: "Coolmay MX3G-C Series All-in-One Programming Manual" "MX3G-C Series All-in-One User Manual" "Coolmay TP Series Touch Screen User Manual"

EX3G-80 series

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Product specifications

Model		EX3G-8043H	EX3G-8050H	EX3G-8070H/HD	EX3G-8100H
Dimension		134*102*34mm	151*96*36mm	200*146*36mm	275*194*35.6mm
Cutout size		120*94mm	143*86mm	192*138mm	262*180mm
Power Consumption		4-6W	5-7W	6-7W	6-8W
HMI					
Features		16.77 million true color resistive touch screen; all sizes can be displayed vertically			
Display type		4.3" TFT	5" TFT	7.0" TFT	10.1" TFT
Display size		97*56mm	108*65mm	154*87mm	222*125mm
Resolution (pixels)		480*272	800*480	800*480/1024*600	1024*600
RAM		128MB		128MB/256MB	256MB
ROM		NAND Flash 128MB		NAND Flash 128MB/256MB	NAND Flash 256MB
CPU		Dual core 1GHZ			
Operation system		Based on Linux system			
COM Port	USB	Type-C (HMI download port); 1 USB 2.0 port			Type-B; 1 USB 2.0 port
	Other	Comes with 1 RS232			Comes with 1 RS232 or optional 1 RS485
	Ethernet	/	Optional 1 network port (cannot coexist with PLC network port)		
programming software		Coolmay Vcool			
PLC					
I/O		Max 12DI/12DO		Max 24DI/20DO (16MR, Y20-Y23 are fixed as MT)	Up to 24DI/20DO (16 MRs, Y20-Y23 fixed as MT)
I/O level		Input: Passive NPN, common terminal isolated; Output MT: low level NPN, COM connected to negative; Output MR: Normally open dry contact;			
DO type and load		Relay MR/MOS tube MOS tube: 2A/point, 4A/4-point COM, 5A/12-point COM; MR: 2A/point, 5A/12 points COM.		Relay MR/Transistor MT (Y0-Y3 are MOS tubes)/Mixed output MRT MOS tube: 2A/point, 4A/4 points COM; MT: 0.5A/point, 0.8A/4 points COM, 1.6A/8 points COM; MR: 2A/point, 4A/4 points COM, 5A/8 points COM, 5A/12 o'clock COM.	
High-speed counting		Conventional 6 channels single phase 60KHz or 2 channels AB (Z) phase 30KHz + 1 channel AB phase 5KHz			
High-speed pulse output		Conventional 8 channels: Y0-Y3 is 100KHz, Y4-Y7 is 10KHz; high-speed counting + high-speed pulse total transmission cannot exceed 480KHz			
Analog	Input type	E K S T J type negative temperature thermocouple/PT100/PT1000/NTC10K /NTC50K/NTC100K/0-10V/0-5V/0-20mA/4-20mA or mixed type, etc.		EKSTJ type thermocouple (can support negative temperature E K S T J)/PT100/PT1000/NTC10K/NTC50K/NTC100K/0-10V/0-5V/-5V/-10V/-10V/0-20mA/4-20mA or mixed type and other special specifications	
	Output type	0-10V/0-5V/0-20mA/4-20mA or mixed type optional		0-10V/ 0-5V/0-20mA/4-20mA/-5-5V/-10-10V (1 negative voltage accounts for 2 DA)	
	Points	Max 4AI/2AO		Max 12AI/8AO(Up to 8 isolated analog inputs (ADS-AD12) can be selected) Max 16AI/8AO(Up to 8 isolated analog inputs (ADS-AD12) can be selected)	
Weighing		/		Optional installation of 2 or 4 weighing channels (cannot coexist with analog input)	
Communication Interface	Default	Comes with 1 TYPE-C programming port; default 1 RS232+1 RS485			Comes with 1 Mini USB programming port; Default: 1 RS232+1 RS485
	Optional	Optional 1 RS485(Specially changed from the default RS232)			Optional 1 RS485 (cannot coexist with screen optional RS485 and PLC default RS232)
	Other				Optional CAN port (20A/B) and network port (cannot coexist with the touch screen network port); Optional WIFI (will occupy the default RS232 port)
Programming software		Compatible with PLC programming software GX Developer8.86Q and GX Works2			

Detailed info. refer to: "Coolmay QM3G-FH All-in-One User Manual", "Coolmay CX3G/FX3GC PLC Programming Manual", "Coolmay TK HMI User Manual"

EX3U-80 series

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EX3U-8043H



EX3U-8050H



EX3U-8070H/HD



EX3U-8100H



Product specifications

Model		EX3U-8043H	EX3U-8050H	EX3U-8070H/HD	EX3U-8100H
Dimension		134*102*34mm	151*96*36mm	200*146*36mm	275*194*35.6mm
Hole Size		120*94mm	143*86mm	192*138mm	262*180mm
Power consumption		4-6W	5-7W	6-7W	6-8W
Power supply		DC24V			
Touch screen part					
characteristic		16.77 million true color resistive touch screen; all sizes can be displayed vertically			
Display Type		4.3*TFT	5*TFT	7.0*TFT	10.1*TFT
Display size		97*56mm	108*65mm	154*87mm	222*125mm
Resolution		480*272	800*480	800*480/1024*600	1024*600
Running Memory		128MB		128MB/256MB	
Storage Memory		NAND Flash 128MB		NAND Flash 128MB/256MB	
CPU		Dual core 1GHZ			
operating system		Linux-based			
COM Port	USB	Type-C (HMI download port); 1 USB 2.0 port			Type-B; 1个USB 2.0 port
	Other	Comes with 1 RS232			Comes with 1 RS232 or optional 1 RS485
	Network port	/	Optional 1 network port (cannot coexist with PLC network port)		
programming software		Coolmay Vcool			
PLC part					
I/O		Max 12DI/12DO		Up to 24 DI/ 20 DO (MR 16, Y20 -Y23 fixed as MT)	Up to 24DI/ 20 DO (MR 16, Y20 -Y23 fixed as MT)
I/O level		Input: Passive NPN, common terminal isolation ; Output MT: Low level NPN, COM connected to negative; Output MR: Normally open dry contact;			
DO type and load		Relay MR/transistor MT MT: 0.5A/point, 2A/4-point COM, 4A/12-point COM; MR: 2A/point, 8A/12 point COM.		Relay MR/transistor MT/hybrid output MRT MT: 0.5A/point, 2A/4-point COM, 4A/8-point COM; MR: 2A/point, 8A/4 point COM, 8A/12 point COM.	
High-speed counting		Conventional 4-channel single-phase 200KHz or 4-channel AB phase 200KHz			
High-speed pulse output		MT output: Conventional 8-channel Y0-Y7 at 200KHz			
Analog	Input type	Comes with 2 voltage 0-10V + 2 current 0-20MA		Comes with 2 voltage 0-10V + 2 current 0-20MA (users can wire and use according to their needs)	
	Output type	Comes with 1 voltage 0-10V + 1 current 0-20MA		Comes with 2 current 0-20MA output	
	Points	Up to 4 inputs and 2 outputs			
Communication Interface	Default	Comes with 1 TYPE-C programming port; default 1 RS232+1 RS485			Comes with 1 Mini USB programming port; Default: 1 RS232+1 RS485
	Optional	Optional 1 RS485(Specially changed from the default RS232)			Optional 1 RS 485 (specially changed from the default RS 232)
	Other	/	Optional network port		
Programming software		Coolmay Vtool PRO			
Common model specifications: EX3U - 8043H/80 50 H -24MR/24MT (-4AD2DA-485P/232H) EX3U - 80 70 H/HD -24MR/24MT (- 4 AD 2 DA-485P/232H) ; EX3U - 80 70 H/HD - 44 M T / 4 4MRT(- 4 AD 2 DA-485P/232H) EX3U - 8 100 H -24MR / 44MT/44MRT (- 4 AD 2 DA-485P/232H) ; 485P/232P means 485/232 is selected on PLC; 485H/232H means 485/232 is selected on touch screen					
For detailed information, please refer to: "Coolmay EX3U Series All-in-One Machine Programming Manual" EX3U Series All-in-One User Manual 《 Coolmay T X80 Series Touch Screen User Manual》					

For detailed information, please refer to: "Coolmay EX3U Series All-in-One Machine Programming Manual" EX3U Series All-in-One User Manual 《Coolmay T K80 Series Touch Screen User Manual》

