



HITECH AUTOMATION

Catalog V8.82

HMI/PLC All-in-one

Programmable Text Monitor

CX2N-HM PLC

CX3G/FX3GC/CX2N/FX2NC /MX2N PLC

True color HMI











CM-RFM& Fiber to CAN /RS485/RS232 modules

Power supply









Inverter

Customization



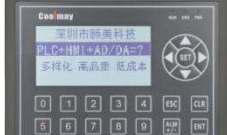



1.1. EX2N HMI/PLC All-in-one

Basic version	EX2N-43H	EX2N-43KH/50KH	EX2N-70H	EX2N-100HA	MX2N-43HB
Upgrade version	EX2N-43HA	EX2N-43KHA/50KHA	EX2N-70HA(S)		
Image					
					
Dimension	134*102*30mm	150*93*32mm	212*148*40mm	275*194*36mm	134*102*30mm
Cutout size	119*93mm	143*86mm	194*138mm	261*180mm	119*93mm
HMI					
Features	60K colors RTP, support U disk storage, WINCE system, RS485/RS232/Ethernet port/Audio optional				60K colors RTP
Display size	97*56mm	97*56/108*65mm	154*87mm	222*133mm	97*56mm
Resolution(pixels)	480*272	43KH: 480*272 50KH: 800*480	H/HAS: 800*480 HA: 1024*600	1024*600	480*272
RAM	H series with 64MB, HA(S) series with 128MB				32MB
ROM	128MB				
Operating system	HA/KHA/HAS:WINCE 7.0 version; H/KH:WINCE 5.0 version				Without operating system
CPU	H series with ARM9 core 640MHz		HA(S) series CORTEX A8 720MHz-1GHz		ARM9 core 216MHz
COM port	1 TP download port,1 USB port				
	1 RS232 optional		1 RS485 or RS232 or Ethernet port optional		1 RS485 Or 1 RS232 optional
Programming software	CoolMayHMI HMI programming software				
PLC					
Digital I/O	Up to 12DI/12DO		Up to 24DI/20DO (At most 18 relay output)		Up to 12DI/12DO
I/O level	Low level NPN,COM connect negative				
Digital output type	Relay MR/transistor MT/mixed MRT; Maximum load of transistor is 500mA; Maximum load of relay is 5A				MOS tube MT/Relay MR, Maximum load of MOS tube is 2A; Maximum load of relay is 5A
High-speed counting	Normally 2 single counting (X0/X3) or 2 AB phase counting (X0-X1/X3-X4) 10KHz EX2N series can be customized up to 6 single-phase counts(4 100KHz、 2 10KHz) Or 3 AB phase counts (2 100KHz、 1 10KHz) or 3 ABZ counts (1 100KHz 、 2 5-10KHz); MX2N-43HB can be customized up to 6 single-phase counting (4 channels 60KHz, 2 channels 10KHz) or 2 AB phase counts (2 channels 60KHz)				
High speed pulse	Normally 4 20KHz, Y0/Y1/Y6/Y7				Normally 420KHz,Y0-Y3
	4 200KHz can be customized		5 200KHz can be customized, the 5th is Y10		2 200KHz or 2 100KHz can be customized
Analog I/O	AI:0-10V/4-20mA/0-20mA/PT100/PT1000/EKSJthermocouple/NTC10K/NTC50K/NTC100K etc.				AI: 0-5V/0-10V/0-20mA/ NTC10K/NTC50K/EKJ Note: 1 NTC10K or NTC50K or EKJ takes up the position of two AD points, up to two; voltage and current types up to four
	AO:0-10V/0-5V/0-20mA or mixed				
	Up to 4AI/2AO		Up to 12AI/8AO		Up to 16AI/8AO
COM port	1 RS232				
	1 RS485 optional		1 RS232 or 1 RS485 optional		Null
Programming software	Compatible with Mitsubishi GX8.52 and WORKS 2				
Regular models: EX2N-43H(A)/43KH(A)/50KH(A)-10/16/20/24MT/MR(-4AD2DA-485P/232H) EX2N-70H(A/AS)-10/16/20/24/30/32/38/40/44 MT/MR/MRT(-12AD8DA-485P/232H) EX2N-100HA-10/16/20/24/30/32/38/40/44 MT/MR/MRT(-12AD8DA-485P/232H) MX2N-43HB-10/16/20/24 MT/MR(-4AD2DA-232H) 485P/232 P means PLC added in 485/232; 485H/232H means 485/232 added in HMI					





1.2 EX3G HMI/PLC All-in-one

Article	EX3G-43HA/HB	EX3G-43(50) KH/KHA	EX3G-70KHA EX3G-70KHAS	EX3G-100HA
Image				
				
Dimension	134*102*30mm	150*93*32mm	226*163*35.6mm	275*194*36mm
Cutout size	119*93mm	143*86mm	218*153mm	261*180mm
Power Consumption	4-6W	4-6W/5-7W	6-7W	6-8W
HMI				
Features	60K colors TP			
Display size	97*56mm	97*56/108*65mm	154*87mm	222*133mm
Resolution (pixels)	480*272	43KH/43KHA: 480*272 50KH/50KHA: 800*480	70KHA:1024*600 70KHAS:800*480	1024*600
RAM	HA/KHA:64MB;HB:32MB		HA/KHA/KHAS: 128MB	
ROM	128MB			
Operation system	KH:WINCE 5.0; HA/KHA:WINCE 7.0 ; HB: without OS			
CPU	HA/KHA:CORTEX A8 720MHz-1GHz; KH:ARM9 400MHz ; HB: ARM9 216MHz		HA/KHA/KHAS:CORTEX A8 720MHz-1GHz	
COM port	1 TP download port,1 USB port			
	1 RS232 optional		1 RS485 or RS232 optional, Ethernet port can be customized for 70KHA/70KHAS/100HA (can't coexist PLC)	
Software	CoolMayHMI V5.** (newest version pls see Http://coolmay.net)			
PLC				
Digital I/O	Up to 12DI/12DO		Up to 30DI/30DO (At most 28 relay outputs)	
I/O level	MT Output: NPN MR output: NO contact		Input: Passive NPN, public terminal isolated	
Output type	MR/MOS Maximum load: MOS is 2A; MR is 5A		MR/MT/MRT Maximum load: MT is 500mA; MR is 5A	
High-speed counting	6 single phase 60KHz or 2 AB(Z) phase 60KHz +1 10KHz			
High-speed pulse	Normally 8channels, Y0-Y3 is 100KHz, Y4-Y7 is 10KHz; High speed counting and high speed pulse total can not exceed 480KHz.			
Analog I/O	AI: 0-10V/4-20mA/0-20mA/PT100/K type thermocouple/NTC10K/50K/100K etc.			
	AO: 0-10V/0-5V/0-20mA/4-20mA or mixed			
COM port	At most 4AD/2DA		At most 16AD/8DA	
	2 programming ports (1 MiniB type USB port, faster downloading speed; 1 Rs232 port)		1 Rs485 or 2 Rs485 (When two Rs485 are optional, one of the Rs485 is changed from the default Rs232), Optional CAN port, Ethernet port (can not coexist with HMI Ethernet port), optional WIFI (will occupy the default Rs232)	
Software	Compatible with Mitsubishi GX Developer8.86 and WORKS 2			
Regular models: EX3G-43HB/43KHB/50KHB-24MT/MR (-4AD2DA-485P/232H) EX3G-70KHA(KHB)/100HA-44MT/MR/MRT (-16AD8DA-485P/232H) EX3G-70KHA(KHB)/100HA-60MT/MR/MRT (-5AD2DA-485P/232H) 485P/232P means 485/232 added in PLC; 485H/232H means 485/232 added in HMI *EX3G-70KHA(KHB)/100HA: If with 30DI/30DO, the maximum analogs are 5AD/2DA; If with 24DI/20DO, the maximum analogs are 16AD/8DA; Support interrupt, linear arc interpolation, PID auto-tuning; 32K step program capacity, 32K power-fail holding register				





2. Programmable Text Monitor

Article	EX2N-30A	EX2N-40A	EX2N-50A
Image			
			
Display Size	57*43mm	101*36mm	108*56mm
Dimension	134*102*30mm	212*148*40mm	212*148*40mm
Cutout Size	119*93mm	194*138mm	194*138mm
Display	3.3"LCD	3.7"LCD	5"LCD
TEXT			
Features	The font can be arbitrarily changed, support animated graphic		
Display screen	Normally blue screen with white letters, gray screen with black letters and Kelly screen is optional		
Resolution (pixel)	128*64	192*64	240*128
ROM	256K		
Pictures	At most 100 pictures		
Software	COOLMAY_30A Programming software	COOLMAY_40A Programming software	COOLMAY_50A Programming software
PLC			
Digital I/O	Up to 12DI/12DO	Up to 24DI/20DO (At most 18 relay output)	
I/O level	NPN		
Output Type	Maximum load of transistor (MT) is 500mA	Relay MR/transistor MT/both MRT. Maximum load of transistor is 500mA; Maximum load of relay is 5A	
High-speed counting	Normally 2 single counting (X0/X3) or 2 AB phase counting (X0-X1/X3-X4) 10KHz At most 6 single counting can be customized (4 100KHz、2 10KHz) Or 3 AB phase counting (2 100KHz、1 10KHz) or 3 ABZ counting (1 100KHz、2 5-10KHz)		
High-speed pulse	Normally 4 20KHz, Y0/Y1/Y6/Y7 4 200KHz can be customized 5 200KHz can be customized, the 5 th is Y10		
Analog I/O	AI: 0-10V/4-20mA/0-20mA/PT100/PT1000/EKSJ type thermocouple /NTC10K/NTC50K/NTC100K etc. AO : 0-10V/0-5V/0-20mA or mixed ones At most 4AI/2AO At most 12AI/8AO		
COM port	1 RS232, it can download the program of both text and PLC 1 RS485 optional 1 RS232、1 RS485 or 1 RS485 ports optional		
Software	Compatible with MITSUBISHI GX8.52 and WORKS 2		
Regular models: EX2N-30A-10/16/20/24MT/MR/MRT(-4AD2DA-485/232) EX2N-40A-10/16/20/24/30/32/38/40/44MT/MR/RT(-12AD8DA-485/232) EX2N-50A-10/16/20/24/30/32/38/40/44MT/MR/MRT(-12AD8DA-485/232)			








3.CX2N-HM PLC

Article	CX2N-HM -22M	CX2N-HM -30M	CX2N-HM -36M	CX2N-HM -48M	CX2N-HM -64M	CX2N-HM -68M	CX2N-HM -80M
	CX2N-HM -24M	CX2N-HM -32M					
Image							
Dimension	125*90*36mm		195*90*36mm		240*90*36mm		285*90*36mm
Cutout Size	117*99mm		187*99mm		232*99mm		277*99mm
Installation	Fixed hole installation and DIN-Rail (35mm)						
Text							
Display size	57*43mm (15*20 Chinese characters can be displayed)						
Diaplay screen	2.8" TFT TP, 320*240 pixels						
Color	60K colors display						
ROM	256KB						
CPU	32 bit processor						
Function key	8 can be defined arbitrary						
Brightness	350cd/m ²						
Display mode	Support display vertically						
Software	《HM E diter Programming Software》						
PLC							
Digital I/O	12DI/12DO	16DI/16DO	20DI/16DO	24DI/24DO	32DI/32DO	32DI/36DO	40DI/40DO
I/O Level	NPN						
Output Type	Relay MR/Transistor MT/Both MRT Maximum load of transistor is 500mA; Maximum load of relay is 5A						
High-speed counting	Normally 2 single counting (X0/X3) or 2 AB phase counting (X0-X1/X3-X4) 10KHz						
	At most 6 single counting can be customized (4 100KHz、 2 10KHz) Or 3 AB phase counting (2 100KHz、 1 10KHz) or 3 ABZ counting (1 100KHz 、 2 5-10KHz)						
High-speed pulse	Normally 4 20KHz, Y0/Y1/Y6/Y7						
	4 200KHz can be customized		5 200KHz can be customized, the 5 th is Y10				
Analog I/O	AI: 0-10V/4-20mA/0-20mA/PT100/PT1000/EKSJ type thermocouple /NTC10K/NTC50K/NTC100K etc.						
	AO: 0-10V/0-5V/0-20mA or mixed ones						
	Up to 8AI/4AO	Up to 2AI/2AO	Up to 16AI/8AO	Up to 8AI/4AO	Up to 8AI/4AO	Up to 20AI/4AO and 16AI/8AO	Up to 8AI/4AO
COM port	1 RS232						
	1 RS485、 1 RS232						
Software	Compatible with MITSUBISHI GX8.52 and WORKS 2, 《HMEditer Software》						
Regular models:	CX2N-HM-16/20/22MT/MR/MRT(-8AD4DA-485/232) CX2N-HM-24MT/MR/MRT(-8AD4DA-485/232) CX2N-HM-30MT/MR/MRT(-2AD2DA-485/232) CX2N-HM-32MT/MR/MRT(-2AD-485/232) CX2N-HM-32/36MT/MR/MRT(-16AD8DA-485/232)			CX2N-HM-48MT/MR/MRT(-8AD4DA-485/232) CX2N-HM-64MT/MR/MRT(-8AD4DA-485/232) CX2N-HM-68MT/MR/MRT(-20AD4DA-485/232) CX2N-HM-80MT/MR/MRT(-8AD4DA-485/232)			
	* CX2N-HM-24M if with 8AD, the maximum digital inputs are 10points CX2N-HM-32M if with 2AI/2AO, the maximum digital points are 16DI/14DO						



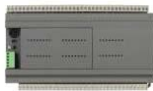

4. FX2NC PLC

Article	FX2NC-12M (single row terminal)	FX2NC-16M (single row terminal)	FX2NC-24M (double row terminal)	FX2NC-28M/30M/32M (double row terminal)
Image				
Dimension	90*60*32mm DIN-Rail (35mm)			
I/O level	NPN			
Digital I/O	6DI/6DO	8DI/8DO	12DI/12DO	16DI/16DO
Output type	Relay MR/Transistor MT/Both MRT Maximum load of transistor is 500mA; Maximum load of relay is 5A			
High-speed counting	Normally 2 single counting (X0/X3) or 2 AB phase counting (X0-X1/X3-X4) 10KHz			
	At most 6 single counting can be customized (2 single phase 10-100K、4 single phase 5-10K) Or 3 AB phase counting (1 100KHz、2 AB phase 5-10KHz) or 3 ABZ counting (1 AB phase X0-X1 is 100KHz、Z phase X2 is 5-10KHz)、2 channels ABZ phase is 5-10KHz			
High-speed pulse	Normally 4 20KHz, Y0/Y1/Y6/Y7			
	4 200KHz can be customized			
Analog I/O	AI: 0-10V/4-20mA/0-20mA/PT100/PT1000/EKSJ type thermocouple /NTC10K/NTC50K/NTC100K etc.			
	AO:0-10V/0-5V mixed ones			
	Up to 2AI/2AO	NULL	Up to 4AI/2AO	NULL
COM port	1 RS422, another 1 RS485 can be added			1 RS422, another 1 RS485 can be added in 30M,2 RS485 ports can be added in 28M
Software	Compatible with MITSUBISHI GX8.52 and WORKS 2			
Regular models: FX2NC-10/12MT/MR(-2AD2DA-485) FX2NC-10/12/16/20/24MT/MR/MRT(-4AD2DA-485) FX2NC-28MT/MR/MRT(-485/485) FX2NC-30MT/MR/MRT(-485) FX2NC-32MT/MR/MRT				



5. CX2N PLC

Article	CX2N-16M	CX2N-22M		CX2N-22M	CX2N-36M	CX2N-64M	CX2N-68M
		CX2N-24M		CX2N-30M	CX2N-48M		CX2N-80M
		CX2N-30M					
		CX2N-32M					
Image							
Dimension	65*90*36 mm	85*90*36mm	125*90*36mm	195*90*36mm	240*90*36mm	285*90*36mm	
Cutout Size	57*99mm	77*99mm	117*99mm	187*99mm	232*99mm	277*99mm	
Installation	Fixed hole installation and DIN-Rail (35mm)						
Digital I/O	8DI/8DO	12DI/10DO	10DI/12DO 12DI/12DO 16DI/14DO 16DI/16DO	At most 20DI/16DO At most 24DI/24DO	At most 32DI/32DO	At most 32DI/36DO At most 40DI/40DO	
I/O level	NPN						
Output Type	Relay MR/Transistor MT/Both MRT Maximum load of transistor is 500mA; Maximum load of relay is 5A						
High-speed counting	Normally 2 single counting (X0/X3) or 2 AB phase counting (X0-X1/X3-X4) 10KHz At most 6 single counting can be customized (4 100KHz、 2 10KHz) Or 3 AB phase counting (2 100KHz、 1 10KHz) or 3 ABZ counting (1 100KHz 、 2 5-10KHz). Note: Only CX2N-48M can be customized into 6 single-phase counting 100KHz or 3 AB phase counting 100KHz Or 3 ABZ phase counts (AB phase 100KHz, Z phase 10KHz)						
High-speed pulse	Normally 4 20KHz, Y0/Y1/Y6/Y7 4 200KHz can be customized 5 200KHz can be customized, the 5 th is Y10						
Analog I/O	AI: 0-10V/4-20mA/0-20mA/PT100/PT1000/EKSJ type thermocouple /NTC10K/NTC50K/NTC100K etc.						
	AO: 0-10V/0-5V/0-20mA or mixed ones						
	NULL	NULL	At most 8AI/4AO At most 2AI/2AO	16AI/8AO 8AI/4AO	8AI/4AO	20AI/4AO Or 16AI/8AD 8AI/4AO	
COM port	1 RS232 Another 1 RS485、 1 RS232 or 2 RS485 ports can be added						
Software	Compatible with MITSUBISHI GX8.52 and WORKS 2						
Regular models:	CX2N-10MT/MR/MRT(-2AD2DA-485/232)			CX2N-32/36MT/MR/MRT(-16AD8DA-485/232)			
	CX2N-16/20/22MT/MR/MRT(-8AD4DA-485/232)			CX2N-48MT/MR/MRT(-8AD4DA-485/232)			
	CX2N-24MT/MR/MRT(-8AD4DA-485/232)			CX2N-64MT/MR/MRT(-8AD4DA-485/232)			
	CX2N-30MT/MR/MRT(-2AD2DA-485/232)			CX2N-68MT/MR/MRT(-20AD4DA-485/232)			
	CX2N-32MT/MR/MRT(-2AD-485/232)			CX2N-80MT/MR/MRT(-8AD4DA-485/232)			
CX2N-24M:	If with 8AD, the maximum digits are 10DI						
CX2N-32M:	If with 2AD/2DA, the maximum digits are 16DI/14DO						
CX2N-68M:	this model is not normal product and can be customized with bulk order						


6.CX3G PLC

Article	CX3G-16M	CX3G-24M	CX3G-32M	CX3G-48M	CX3G-34M	CX3G-64M	CX3G-80M
Image							
Dimension	85*90*36mm	125*90*36mm		195*90*36mm		285*90*36mm	
Cutout size	77*99mm	117*99mm		187*99mm		277*99mm	
Installation	Fixed hole installation and DIN-Rail (35mm)						
Digital I/O	8DI/8DO	12DI/12DO	16DI/16DO	24DI/24DO	18DI/16DO	32DI/32DO	40DI/40DO
I/O level	MT Output: NPN MR output: NO contact Input: Passive NPN, public terminal isolated						
Output type	Relay MR/Transistor MT/Both MRT Maximum load of transistor is 500mA; Maximum load of relay is 5A						
High speed counting	Normally 6 single-phase 60KHz or 2 AB(Z) phases 60KHz + 1 10KHz;						
High speed pulse	Normally 8 channels. Y0-Y3 is 100KHz, Y4-Y7 is 10KHz. High-speed counting + high-speed pulse total output can not exceed 480KHz						
Analog I/O	AI: 0-10V/4-20mA/0-20mA/PT100/PT1000/K type thermocouple /NTC10K/NTC50K/NTC100K etc.						
	AO: 0-10V/0-5V/0-20mA/4-20mA or mixed ones						
	Null	6AD/4DA	2DA	8AD/4DA	12AD/8DA	16AD/8DA	4AD/4DA
COM port	Two programming port(1 Mini B type USB port, faster downloading speed; 1 Rs232, Interface terminal is mouse female port with 8 holes)						
	The total number of COM ports is 2. The default is 2 RS485; Or customized as 1 RS485, 1 RS232; Or customized as a RS485, 1 CAN; Or customized as a RS232, 1 CAN.				The total number of COM ports is 3. The default 2 RS485; Or customized as 1 RS485, 1 RS232; Optional CAN.		
Programming software	Compatible with WORKS 2/ GX Developer 8.86						
Regular models: CX3G-16MT/MR/MRT(-485/232) CX3G-22MT/MR/MRT(-8AD4DA -485/232) CX3G-24MT/MR/MRT(-6AD4DA -485/232) CX3G-30MT/MR/MRT(-2AD2DA -485/232) CX3G-32MT/MR/MRT(-2AD -485/232) CX3G-34MT/MR/MRT(-12AD8DA -485/232) CX3G-48MT/MR/MRT(-8AD4DA -485/232) CX3G-64MT/MR/MRT(-16AD8DA -485/232) CX3G-80MT/MR/MRT(-4AD4DA -485/232)							
Support interruption、 linear and arc interpolated、 PID and modify parameters automatically; with capacity of 32K step program, 32K holding register while power off. *CX3G-24M,if with 8AD,maximum digits are 10DI; *CX3G-32M,if with 2AD/2DA,maximum digits are 16DI/14DO.							













7.FX3GC PLC

Article	FX3GC-16M Communication/analog extension module can be customized	FX3GC-32M FX3GC-30M(-485)
Image		
Dimension	90*60*32mm	
Installation	Fixed hole installation and DIN-Rail (35mm)	
Digital I/O	Up to 8DI/8DO	32M: 16DI/16DO 30M:16DI/14DO
I/O level	MT Output: NPN MR output: NO contact Input: Passive NPN, public terminal isolated	
Output Type	Relay MR/Transistor MT/Both MRT Maximum load of transistor is 500mA; Maximum load of relay is 5A	
High-speed counting	Normally single phase 6 channels 60KHz or 2 channels AB(Z) phase 60KHz + 1 10KHz	
High-speed pulse	normally 8channels,Y0-Y3 is 100KHz, Y4-Y7 is 10KHz; High-speed counting + high-speed pulse total output can not exceed 480KHz	
Analog I/O	AI: 0-10V/4-20mA/0-20mA/PT100/PT1000/K type thermocouple /NTC10K/NTC50K/NTC100K etc. AO: 0-10V/0-5V/0-20mA/4-20mA or mixed ones	
	Analog extension module can be added	NULL
COM port	Two programming port(1 Mini B type USB port, faster downloading speed; 1 Rs422, Interface terminal is 8 holes mouse female port)	
	Rs485/CAN extension module can be added	30:1Rs485 can be added
Software	Compatible with Mitsubishi WORKS 2/GX Developer8.86	
	Regular models: FX3GC-16/32MT/MR/MRT FX3GC-30MT/MR/MRT(-485)	
	Support interruption、 linear and arc interpolated、 PID and modify parameters automatically; with capacity of 32K step program, 32K holding register while power off.	
	Extension module can add at most 2 RS485、 1 CAN、 6AD4DA, Or 1 RS485、 1 CAN port、 8AD4DA Or 1 RS485、 8AD/6DA Or 2 RS485、 1 CAN	







8.MX2N PLC

Article	MX2N-24M
Image	
Dimension	125*90*36mm
Cutout size	117*99mm
Installation	Fixed hole installation and DIN-Rail(35mm)
Digital I/O	12DI/12DO
I/O level	Low level NPN,COM connect negative
Output type	Relay MR/MT (MOS tube) /Relay and MOS tube Mixed Maximum load of MT (MOS tube) is 2A; Maximum load of Relay is 5A
High speed counting	Normally 6 channels single phase counting (X0-X5)or 2 channels AB phase counting (X0-X1/X3-X4) 10KHz At most 6 channels single phase counting can be customized (4 channels 60KHz、2 channels 10KHz) Or 2 channels AB phase counting (2 channels 60KHz)
High speed pulse	Normally 4 channels 20KHz, Y0/Y1/Y2/Y3 4 channels Y0/Y1 200KHz, Y2/Y3 100KHz can be customized
Analog I/O	AI: 0-10V/0-5V/0-20mA NTC10K/NTC50K AO: 0-10V/0-5V/0-20mA or mixed optional At most 4AD/2DA(optional one channel for weighing function) Notes: 1 channel NTC10K or NTC50K need two AD points, at most 2 channels can be customized; Voltage、Current can be 4 channel at most
COM port	1 RS232 1 RS485 or 1 RS232 (Power-up defaults to Mitsubishi programming port protocol)
Programming software	Compatible with Mitsubishi PLC programming software GX8.52 and WORKS 2
Regular models: MX2N-24MR/MT (MOS tube) /MRT(-4AD2DA-485/232)	



9.1.True color HMI

Article		MT6037H	MT6043H(A)	MT6050H(A)	MT6070H(A/AS)	MT6100HA	MT6150HA	
Images	The front panel							
	The back side							
Regulation	Dimension	88*88*25mm	134*102*30mm	146*88*25mm	212*148*40mm	275*194*36mm	365*290*36mm	
	Cutout Size	72*72mm	119*93mm	135*72mm	194*138mm	261*180mm	350*280mm	
	Display size	73*56mm	97*56mm	108*65mm	194*138mm	222*133mm	304*228mm	
	Weight (kg)	About 0.3 kg	About 0.33 kg	About 0.33 kg	About 0.54 kg	About 0.7 kg	About 3.41 kg	
Display	Display	3.5"TFT	4.3"TFT	5"TFT	7.0"TFT	10.2"TFT	15.0"TFT	
	Resolution (pixels)	320*240	480*272	800*480	H/HAS: 800*480 HA: 1024*600	1024*600	1024*768	
	Brightness	300cd/m ²					450cd/m ²	
	Contrast Ratio	400:1						
	Backlight	LED						
	Backlight life	60,000 h						
	Display color	65536 true colors						
	Touch type	4-wire precision resistance network						
Storage	ROM	128MB						
	RAM	H Series with 64MB			HA(S) with 128MB			
	CPU	H series ARM9 core 640MHZ			HA(S): cortex A8 720MHZ-1GHz			
Operation system		H: WINCE 5.0 HA/HAS: WINCE7.0						
Interface	USB Host	Yes						
	USB Client	USB 2.0x1						
	Ethernet	Optional						
	COM port	RS232/RS485						
	Protocol	Support MODBUS、free port and normal PLC communication Protocol						
Calendar		Yes						
Power supply	Input Voltage	Normally DC24±10%VDC, DC12V/DC5V can be customized						
	Consumption	100mA/24V	150mA/24V	150mA/24V	200mA/24V	280mA/24V	500mA/24V	
	Protection Class	IP65 (the front panel)						
	Temperature	Working environment -20~60℃; Storage environment-20~70℃						
	Humidity	20%~90%RH						
Certification	Software	CE						




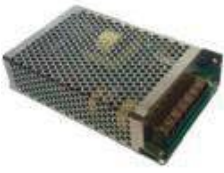



9.2.True color HMI

Article		MT9043H	MT9043(50)KH	MT9070KH
Image	Front			
	Back			
Regulation	Dimension	134*102*30mm	150*93*32mm	226*163*35.6mm
	Cutout size	119*93mm	143*86mm	218*153mm
	Display size	97*56mm	97*56mm	154*87mm
	Weight	about 0.33 kg	about 0.33 kg	about 0.7 kg
Display	Display	4.3" TFT	MT9043KH:4.3" TFT MT9050KH:5.0" TFT	7.0" TFT
	Resolution (pixels)	480*272	MT9043KH:480*272 MT9050KH:800*480	800*480
	Brightness	300cd/m ²		
	Contrast ratio	400:1		
	Backlight	LED		
	Backlight life	60,000 h		
	Display color	65536 true color		
	Touch type	4-wire precision resistance network		
storage	ROM	128MB		
	RAM	32MB	64MB	
	CPU	ARM9 core 216MHz	ARM9 core 288MHz	
Operating system		Null		
COM port	USB	Yes (Mini B type-5Pin program download port)		
	COM port	1 RS232、1 RS485、(MT9043KH/MT9050KH with optional CAN port)		
	Protocol	Support MODBUS、free port and normal PLC communication Protocol		
Calendar		Yes		
Output voltage		DC5V~DC24V		
Consumption		Below 3W	Below 8W	
Protection class		IP65 (front panel)		
Temperature		Working environment 0~50℃; Storage environment -20~70℃		
Humidity		20%~90%RH		
HMI software				




10. Fiber to CAN/RS485/RS232 Module

Article		Fiber to CAN/RS485/RS232 Module
Image	Front	
	Back	
Maximum fiber length		80 Kilometers
Baud rate		0~1Mbps
Optical ports		ST、 SC or FC interface single fiber or dual fiber
Net weight		100g
Dimension		106mm(L)* 65mm(W)* 35mm(H)
Cutout size		98mm*57mm
Working environment temperature		-40℃~+85℃
Humidity		≤95%RH
Installation		Din-Rail、 wall hanging、 Fixed plane
Refer info.: Fiber to CAN、 RS485、 RS232 User Manual		

11. Power supply

Article		Power supply CM6024-12-5	Power supply CX2024	Power supply CM6024	Power supply CM15024
Image	Flank				
	Back				
Installation		Standard guide rail's installation, can be installed on NS35\7.5or NS32 guide slot			screw fixation, vertically or parallelly installation
Dimension		85*90*36mm	65*90*36mm	90*60*32mm	159*97*38mm
Connection mode		7.62 Barrier terminal		5P-7.62 Barrier terminal	7P-9.5Barrier terminal
Input voltage		88~264VAC or 125 373VDC			
Input frequency		47~63HZ			
Output voltage		DC24V/DC12V/DC5V	DC24V		
Output current		1A	0.8A	2.5A	6.5A
Impulse current		30A/230VAC			60A/230VAC
Output accuracy		±1%			
Output efficiency		86%	85%	86%	89%
No-load consumption		<0.5W			
Defensive function		Short circuit/overvoltage overload protection			
Detail info. refer to		_____			

12. Inverter

Article	CM520-0.75/1.5KW	CM540-0.75/1.5/2.2KW	CM540-4.0/5.5/7.5/11KW
Image			
Dimension L*W*Hmm	143*86*114	185*118*156	247*160*204
Weight	0.9kg	1.7kg	3.1kg
Basic Function			
Maximum frequency	Vector control: 0.00~500.00Hz; V/F control: 0.00~500.00Hz		
Carrier frequency	0.8kHz~12kHz, The carrier frequency automatically adjusted based on the load features.		
Input frequency resolution	Digital setting: 0.01Hz; Analog setting: Maximum frequency x0.025%		
Control mode	Open-loop vector control (SVC) ; Closed-loop vector control (FVC) ; VF control.		
Startup torque	G type: 0.25Hz/150% (SVC) ; 0Hz/180% (FVC) P type: 0.5Hz/100%		
Speed range	1: 200 (SVC) ; 1: 1000 (FVC)		
Speed stability accuracy	±0.5% (SVC) ; ±0.02% (FVC)		
Torque control precision	±5% (SVC) (above 10Hz); ±3%(FVC)		
Overload capacity	G type: 150% rated current 60s; 180% rated current 3s.P type: 120% rated current 60s; 150% rated current 3s.		
Torque boost	Automatic torque boost; Manual torque boost 0.1%~30.0%		
V/F curve	Five modes: Straight-line, Multi-points, Square V/F, V/F separation, V/F Semi-separation		
V/F Separation	Two modes: complete separation、Semi-separation		
Ramp mode	Straight-line ramp and S-curve ramp. Four kinds of acceleration/deceleration time with the range of 0.0~6500.0s		
DC injection braking	DC braking frequency: 0.00Hz~maximum, braking time: 0.0s~36.0s , Braking action current value: 0.0%~100.0%		
Jog control	Jog frequency: 0.00Hz~50.00Hz, Jog acceleration and deceleration tome:0.0s~6500.0s		
Simple PLC、multistage speed operation	It implements up to 16 speeds via the simple PLC function or combination of DI terminal states.		
Built-in PID	It can keep constant output voltage automatically when the mains voltage changes.		
Automatic voltage regulation (AVR)	Automatically maintain a constant output voltage when grid voltage changes.		
Over voltage/Over current loss of speed control	Automatic limit of the current and voltage during the operation, prevent frequent over current and overvoltage		
Rapid current limit	Minimizing over-current fault, Protect the normal operation of converter.		
Torque limit and control	"Excavator" characteristics, automatic limit of the torque during the operation, to prevent frequent over-current trip; Closed-loop vector mode torque control can be achieved.		
Other models: CM540-15/18.5/22KW、CM540-30/37KW CM540-45/55/75KW、CM540-90/110KW CM540-132/160/185KW、CM540-200/220/250/280KW CM540-315/350KW. The above models are all iron shells. For detailed dimensions, please contact us			



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