

# COMPARISON OF CX3G FX3GC L02 MX2NC

Difference		Series	CX3G	FX3GC	L02	MX2NC
Instruction operation time			0.42μs/basic instruction; 1.6μs/application instruction		0.35μs/basic command speed	About 30ns/basic instruction; About 200ns (about 25ms for 8K steps)/ application instruction
Digital input level			Passive NPN, common terminal isolation			Active NPN (common terminal connected to negative)
PLC type			Compatible with Mitsubishi FX3G/FX3U			Compatible with Mitsubishi FX2
PLC programming software			Compatible with Mitsubishi FX2N			Compatible with Works 2/GX Developer 8.52 version
Write method			Support RUN writing, more convenient and quick to modify the program			Does not support RUN write
PLC programming port			Comes with two PLC programming ports (Type-C/Mini B USB port and RS232 port) The download speed of the RS232 programming port can reach 115200bps, and the download speed of the USB programming port can reach 12Mbps.			DB9 port RS232 programming port
Communication	RS485		Default 2 RS485; 1 RS485 can be customized	Up to 2 RS485 can be customized	Host: 2 RS485 by default	No RS485 port, default 1 RS232 programming port
	CAN		Up to 1 CAN port can be customized	Up to 1 CAN port can be customized	Host: 2 CAN ports by default	/
	Ethernet port		48M optional 1 Ethernet port	/	Host: 1 Ethernet port by default; expandable L02-EIP (built-in 2 Ethernet ports)	/
	WIFI		/	/	/	/
Weighing module			/		L02-2LC Remarks: The weighing module needs to be used with the L02 host	/
DI/DO			Max 40DI 40DO	Max 16DI 16DO	Host: L02M32T/32R L02M24T/24R Digital input extension: L02-32/16/8EX Digital output expansion: L02-32/16/8EYT L02-16/8EYR Digital input and output expansion: L02-32/16ET L02-16ER	Max 16DI 16DO
Analog	Input		Max 16 AD	Max 8 AD	Host: L02M24T/L02M24R comes with 4 analog inputs, 2 channels 0-10V; 2 channels 0-20mA (4-20mA)	/
			Analog input type: E/K/S/T/J type thermocouple (support negative temperature) / PT100/PT1000/NTC10K/NTC50K/NTC100K A0(0-20mA) A4(4-20mA) V(0-10V) V5(0-5V) V5_(-5V-5V) V_(-10-10)		Host: L02M24T/L02M24R comes with 4 analog inputs, 2 channels 0-10V; 2 channels 0-20mA (4-20mA)	
	Output		Max 8 DA	Max 6 DA	Analog input extension: L02-4RD(PT100/PT1000) L02-4TC(JKSTE) L02-4NTC(NTC10K)	
			A0(0-20mA) A4(4-20mA) V(0-10V) V5(0-5V) V5_(-5V-5V) V_(-10-10V) Note: Output negative voltage will occupy two DAs		L02 host: L02M24T/L02M24R comes with 4 analog outputs, 2 channels 0-10V; 2 channels 0-20mA (4-20mA)	
Expand		No analog expansion		Analog input/output expansion: L02-4AD2DA		
High-speed counting			Generally single-phase 6-channel 60KHz Generally AB (Z) phase 2 channels 60KHz+1 channel AB phase 10KHz		Single phase 6 channels 10KHz AB(Z) phase 2 channels 10KHz	Single phase 6 channels 10KHz AB(Z) phase 2 channels 10KHz
High-speed pulse			Generally 8 channels: Y0-Y3 is 100KHz, Y4-Y7 is 10KHz, independent acceleration and deceleration Note: High-speed counting + high-speed pulse cannot exceed 480KHz Among them, CX3G-16M high-speed pulse generally 8 channels 10KHz		L02 host: L02M32T/L02M24T Generally 8 channels, Y0-Y3 can reach 200KHz, Y4-Y7 can reach 100KHz Note: Y4-Y7 pulse total transmission does not exceed 200KHz	4 channels 10KHz
Program capacity			32K steps			8K
Supported instructions			GSupport circular interpolation, interruption, support high-speed commands such as high-speed resetting, PID support self-tuning (only support step response mode) Supports indexed multi-point transmission instructions/binary floating point number transmission, Gray code conversion, binary floating point angle conversion, data block addition and subtraction, cam matrix, digital tube instructions, etc. Note: 76 more instructions than MX2NC support			Compatible with most instructions of FX2N and 3U positioning instructions floating point instructions (total 123), Supports external interrupts; does not support high-speed commands such as high-speed comparison.
Auxiliary register range			[M0-M383] 384 points for general use; [M384-M1535] 1152 points for holding; [M1536-M7679] 6144 points for general use; [M8000-M8511] 512 points for special.			[M0-M499] 500 points for general use [M500-M1535] 1036 points [M8000-M8255] 255 points for special use
Data register range			[D0-D127] 128 points for general use; [D128-D7999] 7872 points for holding; [R0-R22999] 23000 points for holding; File register [R23000-R23999] 1000 points for special; file register [V0-V7] [Z0-Z7] 16 points for indexing; [D8000-D8511] 512 points for special.			[D0-D199] 200 points for general use [D200-D7999] 7800 points for holding [D8000-D8195] 196 points for special use [D8196-D8255] 59 points for special use [V0-V7 Z0-Z7] 16 points for indexing
Status register range			[S0-S9] 10 points for initial state; [S10-S999] 990 points for holding [S1000-S4095] 3096 points for general use.			[S0-S9] S0-S9 10 points, for maintaining the state [S10-S999] 990 points for holding
Timer range			[T0-T199] 200 points 100ms for general use; [T200-T245] 46 points 10ms for general use; [T246-T249] 4 points 1ms accumulation for holding; [T250-T255] 6 points 100ms accumulation for holding [T256-T319] 64 points 1ms for general use.			/
Counter range			[C0-C15] 16 points, generally 16 bits; [C16-C199] 184 points, 16-bit power failure retention; [C200-C219] 20 points, generally 32 bits; [C220-C234] 15 points 32-bit power failure retention. /			[C235-C255] 20 points high-speed holding
Pointer/Interrupt			[P0-P255] 256 points JUMP CALL; [P0-P1280] 1281 points JUMP CALL (Version 26232 and above)	[P0-P1280] 1281 points JUMP CALL	[P0-P127] 128 points jump, for subroutine [N0-N7] 8 points for master control [I0-I4] [I5-I8] 6 points for external interrupt	
			Input interrupt 6 points [I0-I4] [I5-I8]; Timer 3 points [T6-T8] [T9-T11];			
			Counter interrupt 6 points [I0-I4] [I5-I8]	Counter interrupt 6 points [I010-I060]		