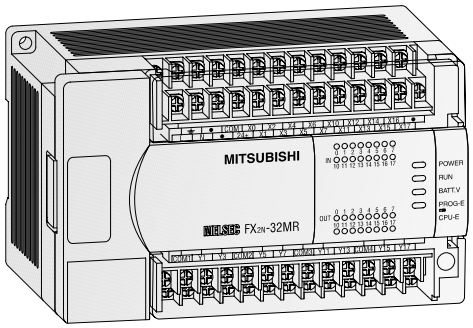
FX2N Series



The FX2N series is the most advanced series in the FX family of PLCs. As standard it includes the greatest range of features and the freedom of modular expandability, with a wide selection of expansion modules and special function modules. The FX2N is also one of the fastest PLC systems available, with a cycle time of just 0.08 (micro seconds) per logical instruction. The FX2N bridges the gap between micro PLCs and the larger more powerful modular PLCs, and its advanced features provide maximum flexibility and control power for all your factory automation applications

Key features include:

- Control scale - 16 to 256 I/O points
- High speed operation
- Outstanding memory capacity (8000 steps, expandable to 16000) and device ranges
- Up to eight of the wide range of special function modules can be added, providing: analog I/O, high speed counters, 16 axis positioning control, pulse train outputs and temperature blocks
- PID control is provided as a standard function or temperature PID control can be provided with the FX2N-2LC special function module
- Complete range of networking modules available to cater for all communication requirements
- AC or DC powered
- Real time clock
- User friendly programming via windows software (GX/GX IEC Developer FX) or hand held units (FX-20P-E)
- Integrated digital I/O with analogue I/O capability (via expansion)

Specifications			FX2N-16 MR-ES/UL	FX2N-32 MR-ES/UL	FX2N-32 MR-ESS/UL	FX2N-48 MR-ES/UL	FX2N-64 MR-ES/UL	FX2N-64 MR-ESS/UL	FX2N-80 MR-ES/UL	FX2N-128 MR-ES/UL
Electrical data										
Max. number inputs/outputs			16	32	32	48	48	64	80	128
Power supply	**AC range (+10 %, -15 %)**		100–240 V AC	100–240 V AC	100–240 V AC	100–240 V AC	100–240 V AC	100–240 V AC	100–240 V AC	100-240 V
	Frequency at AC	**Hz**	50/60 (±10 %)	50/60 (±10 %)	50/60 (±10 %)	50/60 (±10 %)	50/60 (±10 %)	50/60 (±10 %)	50/60 (±10 %)	50/60 (±10 %)
	DC Range (+20 %, -15 %)		—	—	—	—	—	—	—	—
Allowable momentary power failure time		**ms**	10	10	10	10	10	10	10	10
Inputs										
Integrated inputs			8	16	16	24	32	32	40	64
Input current X0→X7 /X10→∞		**mA**	7 / 5	7 / 5	7 / 5	7 / 5	7 / 5	7 / 5	7 / 5	7 / 5
Min. current for logical 1 X0 X7 / X10→∞		**mA**	4.5 / 3.5	4.5 / 3.5	4.5 / 3.5	4.5 / 3.5	4.5 / 3.5	4.5 / 3.5	4.5 / 3.5	4.5 / 3.5
Max. current for logical 0		**mA**	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Isolation			Photocoupler isolation between input terminals and PC power for all base units.							
Outputs										
Integrated outputs			8	16	16	24	32	32	40	64
Output type			Relay	Relay	Transistor	Relay	Relay	Transistor	Relay	Transistor
Switching voltage (max.)		**V**	Generally for relay version: < 250 V AC, < 30 V DC; for transistor version: 5 – 30 V DC							
Max. output current	**- per output**	**A**	2	2	0.5/0.3①	2	2	0.5/0.8①	2	0.5/0.8①
	- per group*	**A**	8	8	0.8/1.6②	8	8	0.8/1.6②	8	0.8/1.6②
Max. switching current	**- inductive load**	**Va**	80	80	12	80	80	12	80	12
	- lamp load	**W**	100	100	1.5	100	1.5	1.5	100	1.5
Response time		**ms**	10	<0.2	<0.2	10	10	<0.2	10	<0.2
Life of contacts (switching times)			For all base units of the MELSEC FX1S series values: 3,000,000 at 20 VA; 1,000,000 at 35 VA; 200,000 at 80 VA							
Mechanical data										
Dimensions (WxHxD)		**mm**	130 x 90 x 87	150 x 90 x 87	150 x 90 x 87	182 x 90 x 87	220 x 90 x 87	220 x 90 x 87	285 x 90 x 87	285 x 90 x 87
Order information		**Stock no.**	141271	141274	141276	141278	141282	141284	141287	141292

① for Y0 and Y1 = 0.3 A; all others 0.5 A

② 0.8 for 4 per group and 1.6 for 8 per group