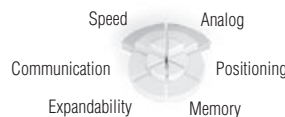


# MELSEC-F Series FX3S Main Units and Configuration



## FX3S - Keeping it Simple

**Controllable I/O:** 10 - 30 points  
**Main Unit I/O:** 10/14/20/30 points

- Integrated power supply (AC powered)
- Maintenance-free EEPROM memory, batteryless
- Built-in USB port for the programming communication function to enable high-speed communication at 12Mbps
- Built-in positioning control
- Integrated real-time clock
- Up to 30 IO

## Product Details

All-in-one CPU, power supply and I/O. Expansion options includes adapter and expansion boards for communication, analog control, or temperature input.

## Fast Instruction Times

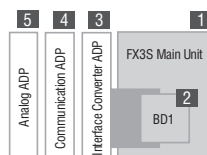
Basic Instructions: 0.21µs / instruction (Contact Instruction)  
 Applied Instructions: 0.5µs / instruction (MOV Instruction)

## Large Memory


4,000 steps of built-in program memory. No battery, no maintenance.

## Large Device Memory

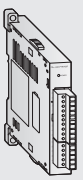

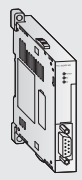
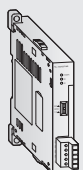
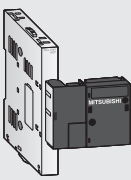
Auxiliary Relays: 1,536 points  
 Timers: 138 points  
 Counters: 88 points  
 Data Registers: 3,000 points



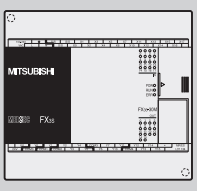
## Expansion Boards

	<b>Communication</b> FX3G-232-BD FX3G-422-BD FX3G-485-BD FX3G-485-BD-RJ	<b>Analog</b> FX3G-2AD-BD FX3G-1DA-BD	<b>Analog Setpoint</b> FX3G-8AV-BD	<b>Digital I/O</b> FX3G-4EX-BD FX3G-2EYT-BD	2
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## Special Adapters

				
<b>Analog</b> FX3U-4AD-ADP FX3U-4DA-ADP FX3U-3A-ADP	<b>Temperature</b> FX3U-4AD-PT-ADP FX3U-4AD-TC-ADP FX3U-4AD-PTW-ADP FX3U-4AD-PNK-ADP	<b>Communication</b> FX3U-232ADP-MB FX3U-485ADP-MB FX3U-ENET-ADP		<b>Interface Converter</b> FX3S-CNV-ADP

## FX3s Main Units



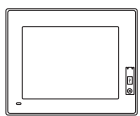
FX3s-10MR/ES

**FX3s Main Units 10-30 I/O**

FX3S-10MR/ES	AC	D	R	FX3S-20MR/ES	AC	D	R
FX3S-10MT/ES	AC	D	T1	FX3S-20MT/ES	AC	D	T1
FX3S-10MT/ESS	AC	D	T2	FX3S-20MT/ESS	AC	D	T2
FX3S-10MR/DS	DC	D	R	FX3S-20MR/DS	DC	D	R
FX3S-10MT/DS	DC	D	T1	FX3S-20MT/DS	DC	D	T1
FX3S-10MT/DSS	DC	D	T2	FX3S-20MT/DSS	DC	D	T2
FX3S-14MR/ES	AC	D	R	FX3S-30MR/ES	AC	D	R
FX3S-14MT/ES	AC	D	T1	FX3S-30MT/ES	AC	D	T1
FX3S-14MT/ESS	AC	D	T2	FX3S-30MT/ESS	AC	D	T2
FX3S-14MR/DS	DC	D	R	FX3S-30MR/DS	DC	D	R
FX3S-14MT/DS	DC	D	T1	FX3S-30MT/DS	DC	D	T1
FX3S-14MT/DSS	DC	D	T2	FX3S-30MT/DSS	DC	D	T2
				FX3S-30MR/ES-2AD	AC	D	R
				FX3S-30MT/ES-2AD	AC	D	T1
				FX3S-30MT/ESS-2AD	AC	D	T2

AC: AC Power Supply      R: Relay Output  
DC: DC Power Supply      T1: Transistor (sink)  
D: DC Input (sink/source)    T2: Transistor (source)

## Optional Equipment and Software



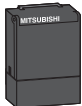
**GOT**  
GOT2000

**Interface Converter**  
FX-232AWC-H

**Software**  
GX Works2  
GX Works2 FX


## Accessories

**Memory Cassette**



FX3G-EEPROM-32L

**Display Module**



FX3S-5DM

## FX3S

### FX3S Main Units with 10 - 14 I/O

Model Number	FX3S-10MR/DS	FX3S-10MR/ES	FX3S-10MT/DS	FX3S-10MT/DSS	FX3S-10MT/ES	FX3S-10MT/ESS
Stocked Item	S	S	S	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	10	10	10	10	10	10
Power Supply (V)	24VDC	100 - 240VAC	24VDC	24VDC	100 - 240VAC	100 - 240VAC
Integrated Inputs	6	6	6	6	6	6
Integrated Outputs	4	4	4	4	4	4
Output Type	Relay	Relay	Transistor (Sink)	Transistor (Source)	Transistor (Sink)	Transistor (Source)
Power Consumption (W)	6	19	6	6	19	19
Weight (kg)	0.22	0.3	0.22	0.22	0.3	0.3
Dimensions (W x H x D) mm	60 x 90 x 75	60 x 90 x 75	60 x 90 x 49	60 x 90 x 49	60 x 90 x 75	60 x 90 x 75

### FX3S Main Units with 10 - 14 I/O

Model Number	FX3S-14MR/DS	FX3S-14MR/ES	FX3S-14MT/DS	FX3S-30MT/DSS	FX3S-14MT/ES	FX3S-14MT/ESS
Stocked Item	S	S	-	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	10	14	14	14	14	14
Power Supply (V)	24VDC	100 - 240VAC	24VDC	24VDC	100 - 240VAC	100 - 240VAC
Integrated Inputs	8	8	8	8	8	8
Integrated Outputs	6	6	6	6	6	6
Output Type	Relay	Relay	Transistor (Sink)	Transistor (Source)	Transistor (Sink)	Transistor (Source)
Power Consumption (W)	6.5	19	6.5	6.5	19	19
Weight (kg)	0.22	0.3	0.22	0.22	0.3	0.3
Dimensions (W x H x D) mm	60 x 90 x 49	60 x 90 x 75	60 x 90 x 49	60 x 90 x 49	60 x 90 x 75	60 x 90 x 75

### FX3S Main Units with 20 - 30 I/O

Model Number	FX3S-20MR/DS	FX3S-20MR/ES	FX3S-20MT/DS	FX3S-20MT/DSS	FX3S-20MT/ES	FX3S-20MT/ESS
Stocked Item	S	S	-	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	20	20	20	20	20	20
Power Supply (V)	24VDC	100 - 240VAC	24VDC	24VDC	100 - 240VAC	100 - 240VAC
Integrated Inputs	12	12	12	12	12	12
Integrated Outputs	8	8	8	8	8	8
Output Type	Relay	Relay	Transistor (Sink)	Transistor (Source)	Transistor (Sink)	Transistor (Source)
Power Consumption (W)	7	20	7	7	20	20
Weight (kg)	0.3	0.4	0.3	0.3	0.4	0.4
Dimensions (W x H x D) mm	75 x 90 x 49	75 x 90 x 75	75 x 90 x 49	75 x 90 x 49	75 x 90 x 75	75 x 90 x 75

### FX3S Main Units with 20 - 30 I/O

Model Number	FX3S-30MR/DS	FX3S-30MR/ES	FX3S-30MT/DS	FX3S-30MT/DSS	FX3S-30MT/ES	FX3S-30MT/ESS
Stocked Item	S	S	-	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	30	30	30	30	30	30
Power Supply (V)	24VDC	100 - 240VAC	24VDC	24VDC	100 - 240VAC	100 - 240VAC
Integrated Inputs	16	16	16	16	16	16
Integrated Outputs	14	14	14	14	14	14
Output Type	Relay	Relay	Transistor (Sink)	Transistor (Source)	Transistor (Sink)	Transistor (Source)
Power Consumption (W)	8.5	21	8.5	8.5	21	21
Weight (kg)	0.35	0.45	0.35	0.35	0.45	0.45
Dimensions (W x H x D) mm	100 x 90 x 49	100 x 90 x 75	100 x 90 x 49	100 x 90 x 49	100 x 90 x 75	100 x 90 x 75

### FX3S Main Units with 30 I/O and Analog Inputs

Model Number	FX3S-30MR/ES-2AD	FX3S-30MT/ES-2AD	FX3S-30MT/ESS-2AD
Stocked Item	S	S	S
Certification	UL • cUL • CE (EMC)		
Integrated Inputs/Outputs	30	30	30
Power Supply (V)	100 - 240VAC	100 - 240VAC	100 - 240VAC
Integrated Digital Inputs	16	16	16
Integrated Analog Inputs	2 (10 bit, 0-10VDC)	2 (10 bit, 0-10VDC)	2 (10 bit, 0-10VDC)
Integrated Outputs	14	14	14
Output Type	Relay	Transistor (Sink)	Transistor (Source)
Power Consumption (W)	21	21	21
Weight (kg)	0.45	0.45	0.45
Dimensions (W x H x D) mm	100 x 90 x 49	100 x 90 x 75	100 x 90 x 75