

MELSEC-F Series FX3G/FX3GE Main Units and Configuration

FX3G - Customized Control

Controllable I/O: 14 - 256 points (with CC-Link remote I/O)

Main Unit I/O: 12/24/40/60 points

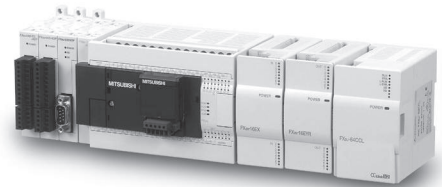
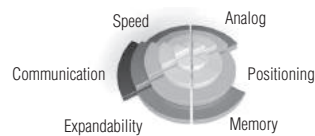
- Integrated real-time clock
- Built-in USB port for the programming communication function to enable high-speed communication at 12Mbps
- Two built-in variable analog potentiometers available for adjusting the timer set time

Product Details

All in one CPU uses the FX3 Series ADP bus system and new expansion boards (BD).

Instruction Times

Basic Instructions: 0.21 μ s / instruction (Contact Instruction)



Large Memory

32,000 steps of built-in program memory. EEPROM memory cassette with loader function is available.

Large Device Memory

Auxiliary Relays:	7,680 points
Timers:	320 points
Counters:	235 points
Data Registers:	8,000 points
Extension Registers:	24,000 points
Extension File Registers:	24,000 points

FX3GE - All-In-One Control

Controllable I/O: 24 - 256 points (with CC-Link remote I/O)

Main Unit I/O: 24/40 points

- Embedded Ethernet communications port
- Embedded analog I/O (2 inputs, 1 output)
- Integrated real-time clock
- Built-in USB port for the programming communication function to enable high-speed communication at 12Mbps.
- Two built-in variable analog potentiometers available for adjusting the timer set time.

Product Details

All in one CPU, power supply and I/O. Can use all the same expansion options as FX3G.



Fast Instruction Times

Basic Instructions: 0.21 μ s / instruction (Contact Instruction)

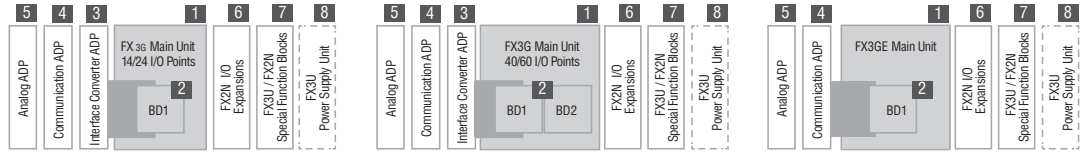
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FX3G FX3GE



Expansion Boards

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

Special Adapters

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<p>FX3U-4AD-ADP</p> <p style="background-color: #800000; color: white; text-align: center;">Analog</p> <p>FX3U-4AD-ADP FX3U-4DA-ADP FX3U-3A-ADP</p>	<p>FX3U-4AD-PNK-ADP</p> <p style="background-color: #ffa500; color: white; text-align: center;">Temperature</p> <p>FX3U-4AD-PT-ADP FX3U-4AD-TC-ADP FX3U-4AD-PTW-ADP FX3U-4AD-PNK-ADP</p>	<p>FX3U-232ADP-MB</p> <p style="background-color: #2e8b57; color: white; text-align: center;">Communication</p> <p>FX3U-232ADP-MB FX3U-485ADP-MB FX3U-ENET-ADP*</p> <p><small>* Not available for FX3GE main units</small></p>
		<p>FX3G-CNV-ADP</p> <p style="background-color: #000080; color: white; text-align: center;">Interface Converter</p>

FX3G Main Units

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<p>FX3G-24MT/ES FX3G-40MT/ES</p>																																																																								
<p>FX3G Main Units 14-60 I/O</p> <table border="0"> <tr> <td>FX3G-14MR/ES</td><td>AC D R</td><td>FX3G-40MR/ES</td><td>AC D R</td></tr> <tr> <td>FX3G-14MT/ES</td><td>AC D T1</td><td>FX3G-40MT/ES</td><td>AC D T1</td></tr> <tr> <td>FX3G-14MT/ESS</td><td>AC D T2</td><td>FX3G-40MT/ESS</td><td>AC D T2</td></tr> <tr> <td>FX3G-14MR/DS</td><td>DC D R</td><td>FX3G-40MR/DS</td><td>DC D R</td></tr> <tr> <td>FX3G-14MT/DS</td><td>DC D T1</td><td>FX3G-40MT/DS</td><td>DC D T1</td></tr> <tr> <td>FX3G-14MT/DSS</td><td>DC D T2</td><td>FX3G-40MT/DSS</td><td>DC D T2</td></tr> <tr> <td>FX3G-24MR/ES</td><td>AC D R</td><td>FX3GE-40MR/ES</td><td>AC D R</td></tr> <tr> <td>FX3G-24MT/ES</td><td>AC D T1</td><td>FX3GE-40MT/ES</td><td>AC D T1</td></tr> <tr> <td>FX3G-24MT/ESS</td><td>AC D T2</td><td>FX3GE-40MT/ESS</td><td>AC D T2</td></tr> <tr> <td>FX3G-24MR/DS</td><td>DC D R</td><td>FX3GE-40MR/DS</td><td>DC D R</td></tr> <tr> <td>FX3G-24MT/DS</td><td>DC D T1</td><td>FX3GE-40MT/DS</td><td>DC D T1</td></tr> <tr> <td>FX3G-24MT/DSS</td><td>DC D T2</td><td>FX3GE-40MT/DSS</td><td>DC D T2</td></tr> <tr> <td>FX3GE-24MR/ES</td><td>AC D R</td><td></td><td></td></tr> <tr> <td>FX3GE-24MT/ES</td><td>AC D T1</td><td></td><td></td></tr> <tr> <td>FX3GE-24MT/ESS</td><td>AC D T2</td><td></td><td></td></tr> <tr> <td>FX3GE-24MR/DS</td><td>DC D R</td><td></td><td></td></tr> <tr> <td>FX3GE-24MT/DS</td><td>DC D T1</td><td></td><td></td></tr> <tr> <td>FX3GE-24MT/DSS</td><td>DC D T2</td><td></td><td></td></tr> </table> <p> AC AC Power supply R Relay output DC DC Power supply T1 Transistor(sink) D DC Input(sink/source) T2 Transistor(source) </p>	FX3G-14MR/ES	AC D R	FX3G-40MR/ES	AC D R	FX3G-14MT/ES	AC D T1	FX3G-40MT/ES	AC D T1	FX3G-14MT/ESS	AC D T2	FX3G-40MT/ESS	AC D T2	FX3G-14MR/DS	DC D R	FX3G-40MR/DS	DC D R	FX3G-14MT/DS	DC D T1	FX3G-40MT/DS	DC D T1	FX3G-14MT/DSS	DC D T2	FX3G-40MT/DSS	DC D T2	FX3G-24MR/ES	AC D R	FX3GE-40MR/ES	AC D R	FX3G-24MT/ES	AC D T1	FX3GE-40MT/ES	AC D T1	FX3G-24MT/ESS	AC D T2	FX3GE-40MT/ESS	AC D T2	FX3G-24MR/DS	DC D R	FX3GE-40MR/DS	DC D R	FX3G-24MT/DS	DC D T1	FX3GE-40MT/DS	DC D T1	FX3G-24MT/DSS	DC D T2	FX3GE-40MT/DSS	DC D T2	FX3GE-24MR/ES	AC D R			FX3GE-24MT/ES	AC D T1			FX3GE-24MT/ESS	AC D T2			FX3GE-24MR/DS	DC D R			FX3GE-24MT/DS	DC D T1			FX3GE-24MT/DSS	DC D T2		
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Special Function Modules

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<p>I/O Extension Blocks</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>FX2N-48ER</p> <p>Powered Extension Units Input/Output Extension Units</p> <p>FX2N-32ER-ES/UL FX2N-32ET-ESS/UL FX2N-48ER-DS FX2N-48ER-ES/UL FX2N-48ER-UA1/UL FX2N-48ET-DSS FX2N-48ET-ESS/UL</p> </div> <div style="width: 45%;"> <p>FX2N-8EX</p> <p>Unpowered Extension Blocks</p> <table border="0"> <tr> <td>Input Extension Blocks</td> <td>Output Extension Blocks</td> <td>Input/Output Extension Blocks</td> </tr> <tr> <td>FX2N-8EX-ES/UL FX2N-8EX-UA1/UL FX2N-16EX-ES/UL</td> <td>FX2N-8EYR-ES/UL FX2N-8EYT-ESS/UL FX2N-8EYR-S-ES/UL FX2N-16EYR-ES/UL FX2N-16EYT-ESS/UL FX2N-16EYS</td> <td>FX2N-8ER-ES/UL</td> </tr> </table> </div> </div>	Input Extension Blocks	Output Extension Blocks	Input/Output Extension Blocks	FX2N-8EX-ES/UL FX2N-8EX-UA1/UL FX2N-16EX-ES/UL	FX2N-8EYR-ES/UL FX2N-8EYT-ESS/UL FX2N-8EYR-S-ES/UL FX2N-16EYR-ES/UL FX2N-16EYT-ESS/UL FX2N-16EYS	FX2N-8ER-ES/UL
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7						
<p>Special Function Blocks</p> <table border="0"> <tr> <td style="background-color: #800000; color: white;">Analog</td> <td style="background-color: #ffa500; color: white;">Temperature</td> <td style="background-color: #000080; color: white;">Network</td> </tr> <tr> <td>FX2N-2AD FX3U-4AD FX2N-2DA FX3U-4DA FX2N-5A FX2N-8AD</td> <td>FX2N-2LC FX2N-4AD-TC FX2N-4AD-PT FX3U-4LC</td> <td>FX3U-16CCL-M FX2N-32CCL FX3U-64CCL FX3U-ENET FX3U-32DP</td> </tr> </table> <p>FX3U-4DA</p>	Analog	Temperature	Network	FX2N-2AD FX3U-4AD FX2N-2DA FX3U-4DA FX2N-5A FX2N-8AD	FX2N-2LC FX2N-4AD-TC FX2N-4AD-PT FX3U-4LC	FX3U-16CCL-M FX2N-32CCL FX3U-64CCL FX3U-ENET FX3U-32DP
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<p>Power Supply Unit</p> <p>FX3U-1PSU-5V</p>						

Optional Equipment and Software

<p>GT14</p>	<p>GOT GOT1000 (GT10/GT11/GT12/GT14/GT16)</p> <p>Interface Converter FX-232AWC-H</p> <p>Software GX Developer GX Works2 GX Works2 FX</p>
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Accessories

<p>FX3G-EEPROM-32L</p>	<p>FX3G-5DM</p>	<p>FXON-65EC</p> <p>Extension Cables FXON-30EC (30cm) FXON-65EC (65cm)</p>	<p>Battery FX3U-32BL</p>
<p>FX2N-CNV-8C</p> <p>PLC Bus Connector</p>			

FX3G

FX3G Main Units with 14 I/O

Model Number	FX3G-14MR/DS	FX3G-14MR/ES	FX3G-14MT/DSS	FX3G-14MT/DS	FX3G-14MT/ESS	FX3G-14MT/ES
Stocked Item	S	S	S	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	14	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 (Source)	Transistor (Sink)	Transistor (Source)	Transistor (Sink)
Power Consumption (W)	19	31	19	19	31	31
Weight (kg)	0.5	0.5	0.5	0.5	0.5	0.5
Dimensions (W x H x D) mm	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86

FX3G Main Units with 24 I/O

Model Number	FX3G-24MR/DS	FX3G-24MR/ES	FX3G-24MT/DSS	FX3G-24MT/DS	FX3G-24MT/ESS	FX3G-24MT/ES
Stocked Item	S	S	S	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	24	24	24	24	24	24
Power Supply (V)	24VDC	100-240VAC	24VDC	24VDC	100-240VAC	100-240VAC
Integrated Inputs	14	14	14	14	14	14
Integrated Outputs	10	10	10	10	10	10
Output Type	Relay	Relay	Transistor (Source)	Transistor (Sink)	Transistor (Source)	Transistor (Sink)
Power Consumption (W)	21	32	21	21	32	32
Weight (kg)	0.55	0.55	0.55	0.55	0.55	0.55
Dimensions (W x H x D) mm	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86	90 x 90 x 86

FX3G Main Units with 40 I/O

Model Number	FX3G-40MR/DS	FX3G-40MR/ES	FX3G-40MT/DSS	FX3G-40MT/DS	FX3G-40MT/ESS	FX3G-40MT/ES
Stocked Item	S	S	S	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	40	40	40	40	40	40
Power Supply (V)	24VDC	100-240VAC	24VDC	24VDC	100-240VAC	100-240VAC
Integrated Inputs	24	24	24	24	24	24
Integrated Outputs	16	16	16	16	16	16
Output Type	Relay	Relay	Transistor (Source)	Transistor (Sink)	Transistor (Source)	Transistor (Sink)
Power Consumption (W)	25	37	25	25	37	37
Weight (kg)	0.7	0.7	0.7	0.7	0.7	0.7
Dimensions (W x H x D) mm	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86

FX3G Main Units with 60 I/O

Model Number	FX3G-60MR/DS	FX3G-60MR/ES	FX3G-60MT/DSS	FX3G-60MT/DS	FX3G-60MT/ESS	FX3G-60MT/ES
Stocked Item	S	S	S	S	S	S
Certification	UL • cUL • CE (EMC)					
Integrated Inputs/Outputs	60	60	60	60	60	60
Power Supply (V)	24VDC	100-240VAC	24VDC	24VDC	100-240VAC	100-240VAC
Integrated Inputs	36	36	36	36	36	36
Integrated Outputs	24	24	24	24	24	24
Output Type	Relay	Relay	Transistor (Source)	Transistor (Sink)	Transistor (Source)	Transistor (Sink)
Power Consumption (W)	29	40	29	29	40	40
Weight (kg)	0.85	0.85	0.85	0.85	0.85	0.85
Dimensions (W x H x D) mm	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86

FX3GE

FX3GE Main Units with 24 I/O

Model Number	FX3GE-24MR/DS	FX3GE-24MR/ES	FX3GE-24MT/DSS	FX3GE-24MT/DS	FX3GE-24MT/ESS	FX3GE-24MT/ES
Stocked Item	S	S	S	S	S	S
Certification	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)
Integrated Inputs/Outputs	24	24	24	24	24	24
Power Supply (V)	24VDC	100-240VAC	24VDC	24VDC	100-240VAC	100-240VAC
Integrated Digital Inputs	14	14	14	14	14	14
Integrated Analog Inputs	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)
Integrated Digital Outputs	10	10	10	10	10	10
Integrated Analog Outputs	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)
Digital Output Type	Relay	Relay	Transistor (Source)	Transistor (Sink)	Transistor (Source)	Transistor (Sink)
Power Consumption (W)	32	32	32	32	32	32
Weight (kg)	0.6	0.6	0.6	0.6	0.6	0.6
Dimensions (W x H x D) mm	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86	130 x 90 x 86

FX3GE Main Units with 40 I/O

Model Number	FX3GE-40MR/DS	FX3GE-40MR/ES	FX3GE-40MT/DSS	FX3GE-40MT/DS	FX3GE-40MT/ESS	FX3GE-40MT/ES
Stocked Item	S	S	S	S	S	S
Certification	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)	UL • cUL • CE (EMC)
Integrated Inputs/Outputs	40	40	40	40	40	40
Power Supply (V)	24VDC	100-240VAC	24VDC	24VDC	100-240VAC	100-240VAC
Integrated Digital Inputs	24	24	24	24	24	24
Integrated Analog Inputs	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)	2 (12 bit, 0-10V or 4-20mA DC)
Integrated Digital Outputs	16	16	16	16	16	16
Integrated Analog Outputs	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)	1 (12 bit, 0-10V or 4-20mA DC)
Digital Output Type	Relay	Relay	Transistor (Source)	Transistor (Sink)	Transistor (Source)	Transistor (Sink)
Power Consumption (W)	37	37	37	37	37	37
Weight (kg)	0.8	0.8	0.8	0.8	0.8	0.8
Dimensions (W x H x D) mm	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86	175 x 90 x 86