Communications and Networking Expansion

Serial Communication Expansion Boards

These communication expansion boards mount on the front of the CPU modules and allow communication with external devices and other CPU modules over serial networks including Modbus.

Model Number	FX5-232-BD	FX5-485-BD	FX5-422-BD-GOT
Stocked Item	S	S	S
Certification	CE		
Applicable PLCs	FX5U/FX5UJ		
Rated Voltage	5 VDC	5 VDC	5 VDC
Current Consumption	20 mA	20 mA	20 mA/5 VDC
Transmission Standard	RS-232C	RS-485/RS-422	RS-422
Max. Distance	15 m (49' 2")	50 m (164')	According to the specification of the GOT
Connection Method	9-pin D-sub, male	European terminal block	8-pin MINI-DIN, female
Terminal Resistor	-	Built-in (OPEN / 110Ω / 330Ω)	-
Insulation	Not insulated		
Communication Method	Half-duplex/Full-duplex		Half-duplex
Baud Rate	300/600/1200/2400/4800/9600/19200/38400/57600/115200 (bps)		9600/19200/38400/57600/115200 (bps)
Weight (kg)	0.02	0.02	0.02
Dimensions (W x H x D) mm	38 x 51.4 x 18.2	38 x 51.4 x 30.5	38 x 51.4 x 15.4

Serial Communication Expansion Adapters

These expansion adapters mount to the left side of the FX5 CPU modules and provide a wide range of serial communication standards including Modbus.

Model Number	FX5-232ADP	FX5-485ADP
Stocked Item	S	S
Certification	UL • cUL • CE	
Applicable PLCs	FX5U/FX5UC/FX5UJ	
Rated Voltage	5 VDC; 24 VDC	
Current Consumption	30 mA / 5 VDC 30 mA / 24 VDC	20 mA / 5 V DC30 mA / 24 VDC
Transmission Standard	RS-232C	RS-485/RS-422
Max. Distance	15 m (49' 2")	1200 m (3937')
Connection Method	9-pin D-sub, male	European terminal block
Terminal Resistor	-	Built-in (OPEN/110Ω / 330Ω)
Insulation	Photocoupler isolation	Photocoupler isolation
Communication Method	Half-duplex/Full-duplex	Half-duplex/Full-duplex
Baud Rate	300/600/1200/2400/4800/9600/19200/38400 57600/115200 (bps)	300/600/1200/2400/4800/9600/19200/3840057600/115200 (bps)
Weight (kg)	0.08	0.08
Dimensions (W x H x D) mm	17.6 x 106 x 82.8	17.6 x 106 x 89.1

CC-Link Networks

Model Number	FX5-CCLGN-MS	FX5-CCLIEF	FX5-CCL-MS
Stocked Item	S	S	S
Certification	UL • cUL • CE	UL • cUL • CE	UL • cUL • CE
Applicable CPU	FX5U/FX5UC	FX5U/FX5UC/FX5UJ	FX5U/FX5UC/FX5UJ
Network Protocol	CC-Link IE TSN	CC-Link IE Field	CC-Link Ver. 2.00 (Ver 1.10 also supported)
Station Type	Master or Local Station (Slave) Authentication Class B device	Intelligent Device Station (Slave)	Master or Intelligent Device Station
Power Supply	24VDC +20%/-15%	5VDC/10mA (internal), 24VDC/230MA (external)	24 VDC +20%, -15%
Current Consumption	220mA	230 mA	100mA
Communication Speed	1Gbps	1Gbps	Master station:156 kbps/625 kbps/2.5 Mbps/5 Mbps/10 Mbps Intelligent device station:156 kbps/625 kbps/2.5 Mbps/5 Mbps/ 10 Mbps/Auto-tracking
Max. Station-to-Station Distance	100m	100m	1200m at 156kbps (varies depending on speed)
Network Topology	Line, star	Line, star, ring	Bus (RS-485)
I/O Points	8	8	8
Max Number of Connectable Slaves (When Operating as Master)	60	-	FX5U/FX5UC: 14 device stations, 14 remote I/O stations FX5UJ: 8 device stations, 6 remote I/O stations
Max Number of Link Points (When Operating as Master)	8K	-	FX5U/FX5UC: 896 FX5UJ: 448
	8K	-	
	4K	-	FX5U/FX5UC: 112 FX5UJ: 96
	4K	-	FX5U/FX5UC: 112 FX5UJ: 96
Weight (kg)	0.3		
Dimensions (W x H x D) mm	50 x 90 x 83		

CC-Link IE Basic, Ethernet, EtherNet/IP, and Bacnet/IP Networks

Model Number	FX5-ENET	FX5-ENET/IP
Stocked Item	S	S
Certification	UL • cUL • CE	
Applicable CPU	FX5U/FX5UC/FX5UJ	
Station Type	CC-Link IE Basic Master 32 connections	EtherNet/IP scanner, adapter 32 connections (Class 1, Class3, UCMM communications)
Other Protocols	32 connections (TCP/IP, Bacnet/IP slave, Modbus TCP, simple CPU communication, MELSOFT, SLMP)	
Power Supply	24VDC (internal)	
Current Consumption	110mA	
Communication Speed	100Mbps/10Mbps	
Max. Station-to-Station Distance	100m	
Network Topology	Star (CC-Link IE Basic)	Star, Line (EtherNet/IP)
I/O Points	8	
Weight (kg)	0.2	
Dimensions (W x H x D) mm	40 x 90 x83	

OPC UA Server Module

Model Number	FX5-OPC
Stocked Item	S
Certification	UL • cUL • CE
Applicable CPU	FX5U/FX5UC
Power Supply	24 VDC
Current Consumption	110 mA
Number of Occupied I/O Points	8
Weight (kg)	0.2
Dimensions (W x H x D) mm	40 x 90 x 83

Anywire ASLINK and PROFIBUS

Model Number	FX5-ASL-M	FX5-DP-M
Stocked Item	S	S
Certification	UL • cUL • CE	
Applicable CPU	FX5U/FX5UC/FX5UJ	
Network Protocol	Anywire ASLINK	Profibus
Station Type	Master	
Power Supply	24 VDC +15%, -10%, ripple voltage 0.5 Vp-p or lower (external), 5VDC (internal)	24VDC (internal)
Current Consumption	100 mA (external), 200mA (internal)	150mA
Maximum Transmission Distance (Total Length)	200 m	1200m/segment
Network Topology	Bus (multidrop, T-branch, tree branch system)	Bus
Number of Data Points	384 I/O max (input: 256 max, output 256 max)	Max 2048 bytes input, 2048 bytes output
Number of Connected Slave Modules	128 max (varies depending on current consumption of each slave module)	64
Number of Occupied I/O Points	8 pts	
Weight (kg)	0.2	
Dimensions (W x H x D) mm	40 x 90 x 97.3	40 x 90 x 88.3