

IDEC » MicroSmart PLC Plus CPU



The MicroSmart FC6A series is available in two types of CPUs: Plus and All-in-One. The Plus type has a dual RJ45 Ethernet port, embedded web server functions and the capability to expand up to 2060 I/O, while the All-in-One type has an embedded serial port and RJ45 Ethernet port capable of expanding up to 520 I/O.

The next generation IDEC MicroSmart FC6A Plus PLC stretches performance beyond micro PLC limits! With its 2,060 I/O capacity, this PLC can control large machines or entire small-scale manufacturing facilities, providing more capabilities for even the most demanding applications. MicroSmart FC6A Plus CPUs now support EtherNet/IP™ protocol. With the addition of industry-standard EtherNet/IP™ scanner capabilities, the FC6A Plus can now connect with, monitor, and control any I/O, variable speed drive, or other intelligent automation device using this popular industrial protocol. In addition, the FC6A Plus can be configured as an EtherNet/IP™ adapter, allowing it to interact with other peer and supervisory systems, such as PLCs and HMIs.

Catalog Number	Description
	IDEC - MicroSmart PLC Plus CPU - w/RJ45 Ethernet - Modbus/TCP + RS-232/RS485 - Modbus/RTU + USB 2.0
	Embedded SD memory port - Data Logging + Web Server & Built-in Web Page Editor
	Op Temp -10 to +55 deg C - DIN rail or panel mounting, CE - UL - Class 1 Div 2 Hazardous Location
	MQTT, Improved PID Algorithm, Free IOS and Android Apps, Email & Text Messaging via Ethernet Port 2
	CPU Part Numbers
FC6A-D16R1CEE	IDEC - PLC Plus - (8) 24VDC Sink/Source Inputs, (8) Relay Outputs - 2A/pt, 2 commons - 7A/common
FC6A-D16P1CEE	IDEC - PLC Plus - (8) 24VDC Sink/Source Inputs, (8) 24Vdc Source Outputs- 0.5A/pt, 1 common - 4A/common
FC6A-D16K1CEE	IDEC - PLC Plus - (8) 24VDC Sink/Source Inputs, (8) 24Vdc Sink Outputs - 0.5A/pt, 1 common - 4A/common
FC6A-D32P3CEE	IDEC - PLC Plus - (16) 24VDC Sink/Source Inputs, (16) 24Vdc Source Outputs - 0.1A/pt, 1 common - 1.6A/common
FC6A-D32K3CEE	IDEC - PLC Plus - (16) 24VDC Sink/Source Inputs, (16) 24Vdc Sink Outputs - 0.1A/pt, 1 common - 1.6A/common
	CPU Adapters and Cartridges
FC6A-PH1	IDEC - HMI module & Communication Adapter - 2nd Eth, 2nd Serial, email & text message
FC6A-PC1	IDEC - RS232C Communication Adapter
FC6A-PC3	IDEC - RS485 Communication Adapter
FC6A-PC4	IDEC - Bluetooth Communication Cartridge - 10m Distance
FC6A-HPH1	IDEC - Expansion Cartridge Base Module
FC6A-PN4	IDEC - (4) 12/24V DC DI Cartridge - Sink/Source - 1 common
FC6A-PTK4	IDEC - (4) 12/24V DC Transistor Output Cartridge - Sink - 1 common
FC6A-PTS4	IDEC - (4) 12/24V DC Transistor Output Cartridge - Source - 1 common
FC6A-PJ2A	IDEC - (2) AI - Voltage/Current Cartridge- 12 Bit Resolution
FC6A-PJ2CP	IDEC - (2) Thermocouple Input Cartridge - 12-15 Bit Resolution
FC6A-PK2AV	IDEC - (2) AO - Voltage Cartridge- 12 Bit Resolution
FC6A-PK2AW	IDEC - (2) AO - Current Cartridge- 12 Bit Resolution
	*Up to 2 cartridges per FC6A base unit

IDEC » MicroSmart PLC Plus IO

Catalog Number	Description
Discrete On/Off Expansion IO Modules	
FC6A-N08A11	IDEC - (2) 100-240V AC DI Module - 2 commons
FC6A-N08B1	IDEC - (8) 24V DC DI Module - Sink/Source - 1 common
FC6A-N16B1	IDEC - (16) DC DI Module - Sink/Source - 1 common 7mA/point
FC6A-N16B3	IDEC - (16) DC DI Module - Sink/Source - 1 common 5 mA/point
FC6A-N32B3	IDEC - (32) DC DI Module - Sink/Source - 2 commons
FC6A-R081	IDEC - (8) 1 NO Relay Output 2A/pt - 7A/common - 2 commons
FC6A-R161	IDEC - (16) 1NO Relay Output 2A/pt - 8A/common - 2 commons
FC6A-T08K1	IDEC - (8) DC DO Module - Sinking - 1 common - 0.5A/pt - 3A/common
FC6A-T08P1	IDEC - (8) DC DO Module - Sourcing - 1 common - 0.5A/pt - 3A/common
FC6A-T16K1	IDEC - (16) DC DO Module - Sinking - 1 common - 0.5A/pt - 3A/common
FC6A-T16P1	IDEC - (16) DC DO Module - Sourcing - 1 common - 0.5A/pt - 3A/common
FC6A-T16K3	IDEC - (16) DC DO Module - Sinking - 1 common - 0.1A/pt - 1A/common
FC6A-T16P3	IDEC - (16) DC DO Module - Sourcing - 1 common - 0.1A/pt - 1A/common
FC6A-T32K3	IDEC - (32) DC DO Module - Sinking - 2 common - 0.1A/pt - 1A/common
FC6A-T32P3	IDEC - (32) DC DO Module - Sourcing - 2 common - 0.1A/pt - 1A/common
FC6A-M08BR1	IDEC - (4) 24V DC Sink/Source Input + (4) 1NO Relay Output - 1 common - 2A/pt - 7A/common
FC6A-M24BR1	IDEC - (16) 24V DC Sink/Source Input + (8) 1NO Relay Output - 2 commons - 2A/pt - 7A/common
Analog +/- 100% Expansion IO Modules - External 24V DC power required	
FC6A-J2C1	IDEC - (2) AI - Voltage/Current - 16 Bit Resolution
FC6A-J4A1	IDEC - (4) AI - Voltage/Current - 12 Bit Resolution
FC6A-J8A1	IDEC - (8) AI - Voltage/Current - 12 Bit Resolution
FC6A-L06A1	IDEC - (4) AI - Voltage/Current + (2) AO - Voltage/Current - 12 Bit Resolution
FC6A-L03CN1	IDEC - (2) AI - Voltage/Current 16Bit - T/C Input - 14 Bit + (1) AO - Voltage/Current - 12 Bit Resolution
FC6A-J4CN1	IDEC - (4) AI - Voltage/Current 16Bit - T/C Input - 14 Bit Resolution
FC6A-J4CH1Y	IDEC - (4) Isolated Thermocouple Input Module - Up to 15 Bit Resolution
FC6A-J8CU1	IDEC - (8) Thermocouple Input Module - 14 Bit Resolution
FC6A-K2A1	IDEC - (2) AO - Voltage/Current - 12 Bit Resolution
FC6A-K4A1	IDEC - (4) AO - Voltage/Current - 12 Bit Resolution
Specialty Expansion IO Modules - External 24V DC power required	
FC6A-EXM1S	IDEC - FC6A Plus Expansion Interface Master Module
FC6A-EXM1M	IDEC - FC6A Plus Expansion Interface Slave Module
FC6A-SIF52	IDEC - (2) port RS232C/RS485 Selectable Communication Module
FC6A-F2MR1	IDEC - PID Loop Combo Module (2) AI + (2) 1NO Relay Output - 30 PID Loop Max
FC6A-F2M1	IDEC - PID Loop Combo Module (2) AI + (2) AO - Voltage/Current - 30 PID Loop Max
Programming Software and Cables	
FC9Y-LP2CDW	WindLDR Programming Software
HG9Z-XCM2A	USB type A to mini-B Programming Cable
FC6A-KC1C	HG Touchscreen Interface cable loose wire
FC6A-KC2C	HG Touchscreen Interface cable D-sub 9pin
C5E-STPBL-S3	Cat5e Ethernet straight-through patch cable, RJ45 male to RJ45 male, 3ft

IDEC » HMI & Power Supplies



High Performance Touchscreen HMI - Color TFT - IP67F - NEMA 4X Outdoor Rated (-20 to 60 deg C) C1 D2, DNV, ABS - Scripting - Multimedia (UL61010-2-201)

Programming Software - SW1A-W1C
24Vdc - 25W Maximum
3 Year Warranty

Part Number	Size	Resolution - Color TFT All	Brightness Nits	Serial Ports	Ethernet	USB Ports A & B	Memory Slot	Audio Out	Memory
HG2G-V5FT22TF-B	5.7"	640 x 480 VGA	800	2	1	2	1		56MB
HG3G-V8XT22MF-B	8.4"	1024 x 768 XVGA	800	2	1	2	1	1 + Video In	56MB
HG3G-VAXT22MF-B	10.4"	1024 x 768 XVGA	700	2	1	2	1	1 + Video In	56MB
HG4G-VCTX22MF-B	12.1"	1024 x 768 XVGA	600	2	1	2	1	1 + Video In	56MB
HG5G-VFXT22MF-B	15.4"	1024 x 768 XVGA	650	2	1	2	1	1 + Video In	56MB

Power Supplies (No Derate)			
Class 1 Div 2			
NEC Class 2			
5 Year Warranty			
(-25 to 70C)			
UL	E467154		
	E177168		
Part Number	Output Volts	Amps	Watts
PS5R-VA05	5VDC	1.5	7.5
PS5R-VB05	5VDC	2	10
PS5R-VA12	12VDC	0.6	7.5
PS5R-VB12	12VDC	1.25	15
PS5R-VC12	12VDC	2.5	30
PS5R-VA24	24VDC	0.3	7.5
PS5R-VB24	24VDC	0.63	15
PS5R-VC24	24VDC	1.25	30
PS5R-VD24	24VDC	2.5	60
PS5R-VE24	24VDC	3.8	90
PS5R-VF24	24VDC	5	120
PS5R-VG24	24VDC	10	240
PS6R-J24	24VDC	20	480

