



## 'MicroSmart' FC4A Logic Controller



Expansion Modules (C24R2 only)

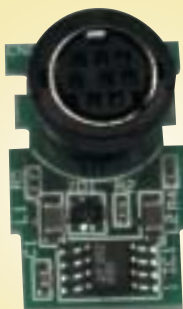


The IDEC Microsmart is one of the latest generation of brick size programmable logic controllers (PLC.) The C24R2 model may be expanded with up to 4 expansion modules and accessories such as, a real time clock, external communications adaptor and LCD display module. Programming is via IDEC's Windows based ladder logic package, downloaded via RS232 port. For complex installations up to 32 PLC's may be networked together. Connections are made to the PLC via a plug-in screw terminal connectors. Although not shown, the entire range is available in a slim-line version (with IDC connectors) suitable for space saving applications, please enquire with sales for more information. For first time users a starter pack provides a cost effective means of purchasing a FC4A-C16R2 PLC, all required software, leads, adaptors and manual to get started.

Rated power voltage	85 - 264VAC
Dielectric strength	1500VAC between I/O and ground
User program storage	EEPROM
Temperature	0 - 55°C
IP Rating	IP20
Dimensions mm.	H=90, W=80, D=70 (C10R2, C16R2) H=90, W=95, D=70 (C24R2)
Approvals	UL, CE



LCD Display Unit



Communications Adaptor

### Inputs specification

Digital	20.4V - 28.8VDC, 3.4kohm (impedance)
Analogue	0-10VDC, 1megohm (impedance) 4-20mA, 10 ohm (impedance)
Internal analogue input	2 built-in user adjustable potentiometers provide 0-10VDC signal
Resistance thermometer	Pt 100 3-wire type (-100 to 500°C) 5ohm max (impedance)
Thermocouple (type)	K (0 - 1300°C), J (0 - 1200°C), T (0 - 400°C) 250 ohm max (impedance)

### Outputs specification

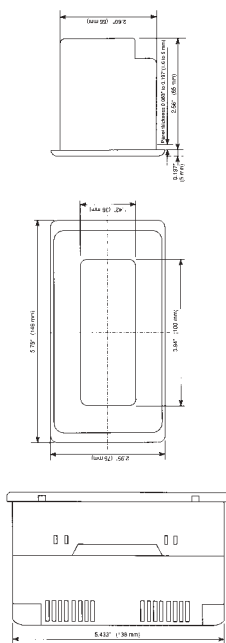
Relay	1 N/O, 2A at 240VAC/30VDC
Analogue	0-10VDC, 2 kohm max. (impedance) 4-20mA, 300 ohm max. (impedance)
Transistor (sink/source)	300mA per output point, leakage 0.1mA max.

### Note:

\*Accessories can be fitted to all CPU's with the exception of the C10R2 which only has one communication port and therefore cannot accept external adaptors for external communications.  
\*Expansion modules can only be plugged in to the C24R2 model.

Stock No.	Manf Ref'	Input Type	Outputs	Unit Price		
				1-4	5-9	10+
<b>CPU's</b>						
5502309	FC4A-C10R2	6 DIGITAL (1 INTERNAL POT)	4 RELAY	89.00	86.33	83.66
5502312	FC4A-C16R2	9 DIGITAL (2 INTERNAL POTS)	7 RELAY	129.00	125.13	121.26
5502315	FC4A-C24R2	14 DIGITAL (2 INTERNAL POTS)	10 RELAY	169.00	163.93	158.86
<b>Expansion Modules(for C24R2 only)</b>						
5502318	FC4A-N08B1	8 DIGITAL		45.00	43.65	42.30
5502321	FC4A-N16B1	16 DIGITAL		70.00	67.90	65.80
5502324	FC4A-M08BR1	4 DIGITAL	4 RELAY	60.00	58.20	56.40
5502327	FC4A-M24BR2	16 DIGITAL	8 RELAY	155.00	150.35	145.70
5502330	FC4A-T08K1		8 TRANSISTOR SINK (NPN)	55.00	53.35	51.70
5502333	FC4A-T08S1		8 TRANSISTOR SOURCE (PNP)	55.00	53.35	51.70
5502336	FC4A-L03A1	2 ANALOGUE	1 ANALOGUE	195.00	189.15	183.30
5502339	FC4A-L03AP1	1 THERMOCOUPLE/1RES THERM	1 ANALOGUE	220.00	213.40	206.80
<b>Accessories (which plug into the main CPU)</b>						
5502342	FC4A-PT1	REAL TIME CLOCK CARTRIDGE		20.00	19.40	18.80
5502345	FC4A-PC1	RS232C MINI DIN CONNECTOR (FOR C16R2, C24R2 MODELS ONLY)		20.00	19.40	18.80
5502348	FC4A-PC2	RS485 MINI DIN CONNECTOR (FOR C16R2, C24R2 MODELS ONLY)		20.00	19.40	18.80
5502351	FC4A-PC3	RS 485 TERMINAL CONNECTOR (FOR C16R2, C24R2 MODELS ONLY)		20.00	19.40	18.80
5502354	FC4A-PH1	LCD DISPLAY MODULE		28.00	27.16	26.32
5502357	FC4A-PM32	MEMORY CARTRIDGE (32k)		18.00	17.46	16.92
<b>Programming Software</b>						
5502360	FC9Y-LP2CDW	WindLDR Ver.4 95/98 & NT		98.00	95.06	92.12
5502363	FC2A-KC4C	PC to PLC PROGRAMMING CABLE (9 way D type female to mini DIN)		28.00	27.16	26.32
<b>Starter Kit</b>						
5502366	FC4START16	PLC STARTER PACKAGE (Includes 16 I/O PLC, all required software, leads, adaptors and manual)		162.00	157.14	152.28

**Touchscreen  
HG1B**



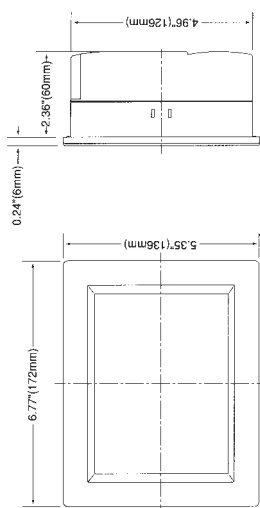
A panel mounted bright blue monochrome LCD touchscreen designed for use where interaction is required between the operator and the machine or process. The HG1B is housed in a compact design and features 48 individual touch zones (12x4mm) with a fast response time of 300ms, 127KB memory on up to 100 configurable pages. Touchscreen can be used to change pages on screen, ramp analogue values, toggle digital data, acknowledge alarms, bar graphs and much more. Two built-in communications ports RS232 and RS485. Alarms with internal buzzer and flashing screen. Windows based configuration software.

Voltage rating	24VDC, ripple factor 10% max
Power consumption	10W max.
Temperature	0 to 55°C
Panel cutout	138mm x 66mm
IP Rating	IP65
Operating force	1 Newton (102 gram force)
Operating life	1,000,000 touch min.
Element life	50,000 hrs min.
Backlight life	20,000 hrs min.
Graphics	Displays any bitmap image, library of bitmaps included with configuration software.
Operator feedback	Visual & audible feedback of touch input
Approvals	UL listed, CE marked

**Note:** Communication drivers and interface cables, for most major PLC brands (IDEC, Omron, Mitsubishi etc.) are available, please enquire with sales.

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-4	5-9	10+
5502369	HG1B-SB22WF	TOUCHSCREEN	399.00	387.03	375.06
5502372	HG9Y-XSS2W	PROGRAMMING SOFTWARE (CD-ROM)	0.00	0.00	0.00
5502375	HG9Z-XCM22	MAINTENANCE CABLE FOR STANDARD PC	49.00	47.53	46.06
5502378	FC4A-KC1C	PLC CABLE FOR MICROSMART	49.00	47.53	46.06

**Full Colour Touchscreen  
HG2A**



A panel mounted feature-packed full colour LCD touchscreen designed for use where interaction is required between the operator and the machine or process. The HG2A features 70 touch zones per screen with a fast response time of 300ms, 279KB memory on up to 150 configurable pages. Facility to import any bitmap image, graphics and printing capabilities, and design up to 60 individual alarms. A real time clock offers sophisticated trending capabilities which can accurately track up to 16 channels in a given system. Touchscreen input can be used to change pages on screen, ramp analogue values, toggle digital data, acknowledge alarms, and much more. Available with built-in RS232 or RS485 communications ports. Alarms with internal buzzer and flashing screen. Windows based configuration software. A membrane type protective cover is also available.

Voltage rating	24VDC, ripple factor 10% max
Power consumption	15W max.
Temperature	0 to 55°C
Panel cutout	162.5mm x 126.5mm
IP Rating	IP65
Operating force	1 Newton (102 gram force)
Operating life	1,000,000 touch min.
Colour display	5.5" STN 8-colour LCD
Backlight life	10,000 hrs min.
Graphics	Displays any bitmap image, library of bitmaps included with configuration software.
Memory	64K (BMP files), 215K (data & components)
Operator feedback	Visual & audible feedback of touch input
Approvals	UL listed, CE marked

**Note:** Communication drivers and interface cables for most major PLC brands (IDEC, Omron, Mitsubishi, Modicon, Koyo, Aromat, GE Fanuc, Keyence and more) are available, please enquire with sales.

Stock No.	Manf Ref <sup>1</sup>	Type	Unit Price		
			1-4	5-9	10+
5502381	HG2A-SS22BF	TOUCHSCREEN WITH RS232 PORT	809.00	784.73	760.46
5502384	HG2A-SS22CF	TOUCHSCREEN WITH RS485 PORT	809.00	784.73	760.46
5502387	HG9Z-ZSS2W	PROGRAMMING SOFTWARE (CD-ROM)	85.00	82.45	79.90
5502375	HG9Z-XCM22	MAINTENANCE CABLE FOR STANDARD PC	49.00	47.53	46.06
5502378	FC4A-KC1C	PLC CABLE FOR MICROSMART	49.00	47.53	46.06
5502390	HD9Z-2D1	PROTECTIVE COVER	7.50	7.28	7.05