Vision™ OPLC™

Technical Specifications
Model V570-57-T40B

This guide provides specifications for Unitronics' color touchscreen controller. You can find additional documentation on the Unitronics' Setup CD and in the Technical Library at www.unitronicsplc.com.

Technical Specifications

Power Supply

Input voltage	24VDC
Permissible range	20.4-28.8VDC
Max. current consumption	320mA@24VDC

Battery

Back-up	7 years typical at 25°C, battery back-up for RTC and system data, including variable data.
Replaceable	Yes, without opening the controller.

Graphic Display Screen	See Note 1
LCD Type	TFT
Illumination backlight	CCFL fluorecent lamp
Display resolution, pixels	320x240 (QVGA)
Viewing area	5.7"
Colors	65,536
Touchscreen	Resistive, analog
'Touch' indication	Via buzzer
Screen brightness	Via software (Store value to SI 9).
Keypad	Displays virtual keyboard when the application requires data entry.

Notes:

1. Note that the LCD screen may have a single pixel that is permanently either black or white.

Program

Memory size	Application Logic – 2MB, Images – 12MB, Fonts – 1MB		
Operand type	Quantity	Symbol	Value
Memory Bits	8192	MB	Bit (coil)
Memory Integers	4096	MI	16-bit
Long Integers	512	ML	32-bit
Double Word	256	DW	32-bit unsigned
Memory Floats	64	MF	32-bit
Timers	384	T	32-bit
Counters	32	C	16-bit
Data Tables	120K dynamic data (recipe parameters, datalogs, etc.) 192K fixed data (read-only data, ingredient names,etc)		
HMI displays	Up to 1024		
Program scan time	9 µsec per 1K of typical application		

Removable Memory

SD card	Compatible with fast SD cards; store datalogs, Alarms, Trends, Data Tables, backup Ladder, HMI, and OS. See Note 2

Notes:

2. User must format via Unitronics SD tools utility.

Communication

Serial ports	2. See Note 3	
RS232		
Galvanic isolation	Yes	
Voltage limits	±20VDC absolute maximum	
Baud rate range	300 to 115200 bps	
Cable length	Up to 15m (50')	
RS485		
Galvanic isolation	Yes	
Voltage limits	–7 to +12VDC differential maximum	
Baud rate range	300 to 115200 bps	
Nodes	Up to 32	
Cable type	Shielded twisted pair, in compliance with EIA RS485	
Cable length	1200m maximum (4000')	
CANbus port	1	
Nodes	CANopen: 127 / Unitronics' CANbus protocols: 60	
Power requirements	24VDC (±4%), 40mA max. per unit	
Galvanic isolation	Yes, between CANbus and controller	
Cable length/baud rate See Note 3	25 m / 1 Mbit/s 100 m / 500 Kbit/s 250 m / 250 Kbit/s 500 m / 125 Kbit/s 500 m / 100 Kbit/s 1000 m* / 50 Kbit/s 1000 m* / 20 Kbit/s	* If you require cable lengths over 500 meters, contact technical support.
Optional port	User may install a single Ethernet port, or an RS232/RS485 port. Available by separate order.	

Notes:

3. The standard for each port is set to either RS232/RS485 according to DIP switch settings. Refer to the Installation Guide.

I/Os

	Number of I/Os and types vary according to module. Supports up to 1000 digital, high-speed, and analog I/Os.
Snap-in I/O modules	Plugs into rear port to create self-contained PLC with up to 62 I/Os.
Expansion modules	Local adapter (P.N. EX-A1), via I/O Expansion Port. Integrate up to 8 I/O Expansion Modules comprising up to 128 additional I/Os.
	Remote adapter (P.N. EX-RC1), via CANbus port. Connect up to 60 adapters; connect up to 8 I/O expansion modules to each adapter.
Exp. port isolation	Galvanic

Dimensions

Size	197X146.6X68.5mm (7.75" X 5.77" X2.7"). See Note 4
Weight	750 gm (26.4 oz)

Notes:

4. For exact dimensions, refer to the product's Installation Guide.

Mounting

Panel-mounting	Via brackets

Environment

Inside cabinet	IP20 / NEMA1 (case)
Panel mounted	IP65/NEMA4X (front panel)
Operational temperature	0 to 50ºC (32 to 122ºF)
Storage temperature	-20 to 60ºC (-4 to 140ºF)
Relative Humidity (RH)	5% to 95% (non-condensing)