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 320mA@24VDC Max. current consumption

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

TFT

LCD Type

CCFL fluorecent lamp

Illumination backlight Display resolution, pixels

320x240 (QVGA)

5.7"

See Note 1

Viewing area Colors

65,536

Touchscreen

Resistive, analog

'Touch' indication

Via buzzer

Screen brightness

Via software (Store value to SI 9).

Keypad

Program

Counters

Displays virtual keyboard when the application requires data entry.

MB

Notes:

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

Memory size	Application Logic – 2MB, Images – 12MB, Fonts – 1I		
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	Т	32-bit

С **Data Tables** 120K dynamic data (recipe parameters, datalogs, etc.) 192K fixed data (read-only data, ingredient names, etc)

Up to 1024 HMI displays

Program scan time 9 usec per 1K of typical application

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16-bit

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 Unitronics' CANbus protocols
127 60

Power requirements 24VDC (±4%), 40mA max. per unit Galvanic isolation Yes, between CANbus and controller

 Cable length/baud rate
 25 m
 1 Mbit/s

 See Note 3
 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 * If you require cable lengths over 500 m* 20 Kbit/s meters, contact technical support.

Optional port User may install a single Ethernet port, or an RS232/RS485 port.

Available by separate order.

Notes:

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

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

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 50°C (32 to 122°F)
Storage temperature -20 to 60°C (-4 to 140°F)
Relative Humidity (RH) 5% to 95% (non-condensing)

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