# Vision™ OPLC™

Technical Specifications
Models V570-57-T20B & V570-57-T20B-J,
V570-57-T40B

This guide provides specifications for Unitronics' color touchscreen controllers V570-57-T20B & V570-57-T20B-J and V570-57-T40B. You can find additional documentation on the Unitronics' Setup CD and in the Technical Library at <a href="https://www.unitronics.com">www.unitronics.com</a>.

## **Technical Specifications**

Power	Supply	

	V570-57-T20B & V570-57-T20B-J	V570-57-T40B
Input voltage	12 or 24VDC	24VDC
Permissible range	10.2-28.8VDC	20.4-28.8VDC
Max. current consumption	540mA@12V 270mA@24V	320mA@24V

**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

V570-57-T20B & V570-57-T40B

V570-57-T20B-J

LCD Type TFT TFT

Illumination backlight White LED CCFL fluorescent 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.

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<u>Program</u>								
Memory size	Application	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	Т	32-bit					
Counters	32	С	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	4						
Program scan time	9 µsec pei	1K of typica	al 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.

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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 meters, contact technical support.

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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.

 V570-57-T20B & V570-57-T20B-J supports both 12 and 24VDC CANbus power supply, (±4%), 40mA maximum per unit. Note that if 12 VDC is used, the maximum cable length is 150 meters.

## 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 5

Weight 750 gm (26.4 oz)

### Notes:

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

# <u>Mounting</u>

Panel-mounting Via brackets

#### Environment

Inside cabinet IP20 / NEMA1 (case)

Panel mounted V570-57-T20B & V570-57-T20B-J

V570-57-T40B

IP65/NEMA4X IP65/66/NEMA4X

(front panel) (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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