Vision™ OPLC™

This guide provides specifications for Unitronics' LCD color touchscreen models V290-19-C30B and V290-19-T40B.

You can find additional information in the Vision User Guide.pdf, an e-book located on the Unitronics' Setup CD and in the Technical Library at www.unitronics.com.

Technical Specifications

Power Supply

Input voltage	24VDC
Permissible range	20.4 VDC to 28.8VDC with less than 10% ripple
Max. current consumption	T.B.D.
Typical power consumption	T.B.D.

Battery

Back-up	7 years typical at 25°C, battery back-up for RTC and system data, including variable data.
Replacement	Yes. Refer to instructions in the document: Replacing a Battery V230-260-280-290.pdf, available from Unitronics' Technical Library.

Graphic Display Screen

LCD Type	V290-19-C30B	V290-19-T40B
	CSTN	TFT
Illumination backlight	CCFL fluorescent lamp	
Display resolution, pixels	320x240 (QVGA)	
Viewing area	5.7"	
Colors	256	
Touchscreen	Resistive, analog	
'Touch' indication	Via buzzer	
Screen contrast	Via software (Store value to SI 7). Refer to VisiLogic Help topic Setting LCD Contrast.	

Program

Application memory	1000K		
Operand type	Quantity	Symbol	Value
Memory Bits	4096	MB	Bit (coil)
Memory Integers	2048	MI	16-bit signed/unsigned
Long Integers	256	ML	32-bit signed/unsigned
Double Word	64	DW	32-bit unsigned
Memory Floats	24	MF	32-bit signed/unsigned
Timers	192	T	32-bit
Counters	24	C	16-bit

Data Tables	120K (RAM)/ 192K (Flash)
HMI displays	Up to 255
Execution time, bit operation	0.4µsec

Communication

Serial Ports	2. See Note 1
RS232	
Galvanic isolation	Yes
Voltage limits	±20V
Baud rates	300 to 115200 bps

RS485

Galvanic isolation	Yes
Voltage limits	±20V
Baud rate range	300 to 115200 bps
Nodes	Up to 32

CANbus 1 port

Power requirements	24VDC (±4%), 40mA max. per unit
Galvanic isolation	Yes, between CANbus and controller
Nodes	Up to 63

Cable length/baud rate

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.

Notes:

1. The standard for each port is set to either RS232/RS485 by settings and wiring. Refer to the Installation Guide.

I/Os

Via module	Number of I/Os and types vary according to module. Supports up to 171 digital, high-speed, and analog I/Os.
Snap-in modules	Plugs onto rear of controller, provides an on-board I/O configuration.
Expansion modules	Via adapter, use up to 8 I/O Expansion Modules; add up to 128 I/Os.
Exp. port isolation	Galvanic

Dimensions

Size	260 x 155 x 72 mm (10.24 x 6.1 x 2.8")
Weight	800g (28.2 oz)

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)