

This guide provides specifications for Unitronics' Models 230/260/280/290 (Non-color Screens).

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](http://www.unitronics.com).

## Technical Specifications

### Power Supply

Input voltage	12VDC or 24VDC
Permissible range	10.2VDC to 28.8VDC with less than 10% ripple
Max. current consumption	

	V230	V260	V280	V290
@12VDC	280mA	460mA	540mA	470mA
@24VDC	140mA	220mA	270mA	230mA
Typical power consumption	2.5W	4.2W	5.4W	5.1W

### 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

	V230	V260	V280	V290
LCD Type	STN	Neg. blue STN	Graphic B&W FSTN	
Illumination backlight	LED yellow-green	CCFL fluorescent lamp		
Display resolution, pixels	128x64	240x64	320x240 (QVGA)	
Viewing area	3.2"	5.4"	4.7"	5.7"
Touchscreen	None		Resistive, analog	
'Touch' indication	None		Via buzzer	
Screen contrast	Manually adjusted. Refer to section Operating Panel Options in Vision User Guide.		Via software (Store value to SI 7) Refer to VisiLogic Help topic Setting LCD Contrast.	

### Keyboard

	V230	V260	V280	V290
Number of keys	24	33	27	none (virtual)
	Includes soft keys and alphanumeric keypad			
Key type	Metal dome, sealed membrane switch			none
Slides	Picture, alphanumeric keypad, and Function keys			none

### 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 0.5msec per 1K word

### **Communication Ports**

RS232	2 ports	
Isolation	No	
Voltage limits	±20V	
Baud rates	COM 1	COM 2
	300 to 57600 bps	300 to 115200 bps

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.

### **I/O Expansion**

Expansion port Via adapter, use up to 8 I/O Expansion Modules comprising up to 128 additional I/Os. Number of I/Os and types vary according to module.

### **Dimensions**

Size See mechanical drawings in the document V230\_260\_280\_290 Installation Guide.pdf, available from Unitronics' Technical Library.

	V230	V260	V280	V290
Weight	429g (15.1 oz)	695g (24.5 oz)	860g (30.4 oz)	840g (29.7 oz)

### **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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