Vision™ OPLC™

Technical Specifications
V530-53-B20B

This guide provides specifications for Unitronics' monochrome touchscreen controller V530-53-B20B.

For additional product documentation, check the Technical Library, located at www.unitronics.com and on the Unitronics' Setup CD.
Technical support is available at the site, and from support@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	
12VDC	470mA
24VDC	230mA
Typical power consumption	5.1W
Battery	
Back-up	7 years typical at 25°C, battery back-up for RTC and system data, including variable data
Replacement	Yes, without opening the controller.
Graphic Display Screen	
LCD Type	Graphic, monochrome black and white, FSTN
Display resolution, pixels	320x240 (QVGA)
Viewing area	5.7"
Touchscreen	Resistive, analog
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
Long Integers	256	ML	32-bit
Double Word	64	DW	32-bit unsigned
Memory Floats	24	MF	32-bit
Timers	192	T	32-bit
Counters	24	C	16-bit

Data Tables	120K (dynamic)/ 192K (static)
HMI displays	Up to 255
Program scan time	30µsec per 1K of typical application

Communication

Serial Ports	2. See Note	
RS232		
Galvanic isolation	No	
Voltage limits	±20V	
Baud rate range	COM1	COM2
	300 to 57600 bps	300 to 115200 bps
Cable length	Up to 15m (50‘)	
RS485		
Galvanic isolation	No	
Voltage limits	–7 to +12V	
Baud rates	300 to 115200 bps	
Nodes	Up to 32	
Cable type	Shielded twisted pair, in compliance with EIA RS485	
Cable length	Up to 1200m (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
	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 an additional port, available by separate order. Available port types are: RS232/RS485, and Ethernet.

Notes:

COM 1 supports RS232 only.
COM 2 may be set to either RS232/RS485 according to jumper settings as shown in the product’s Installation Guide. Factory setting: RS232.

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 I/O modules	Plugs into rear port; provides an on-board I/O configuration.
Expansion modules	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	197X146.6X68.5mm (7.75" X 5.77" X2.7")
Weight	750g (26.5 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)

KLINKMANN

Helsinki
tel. +358 9 540 4940
automation@klinkmann.fi

St. Petersburg
tel. +7 812 327 3752
klinkmann@klinkmann.spb.ru

Moscow
tel. +7 495 641 1616
moscow@klinkmann.spb.ru

Yekaterinburg
tel. +7 343 287 19 19
yekaterinburg@klinkmann.spb.ru

Samara
tel. +7 846 273 95 85
samara@klinkmann.spb.ru

Kiev
tel. +38 044 495 33 40
klinkmann@klinkmann.kiev.ua

Riga
tel. +371 6738 1617
klinkmann@klinkmann.lv

Vilnius
tel. +370 5 215 1646
post@klinkmann.lt

Tallinn
tel. +372 668 4500
klinkmann.est@klinkmann.ee

Minsk
tel. +375 17 200 0876
minsk@klinkmann.com