

## Panels

### MODEL VX500 - PARADIGM COLOR GRAPHICAL O.I.



- 7.5" FULL VGA 16 COLOR DISPLAY 640 X 480 PIXEL CCFL DSTN
- POWERFUL 32-BIT PROCESSOR AND ACCELERATED GRAPHICS CONTROLLER FOR HIGH PERFORMANCE LEVELS

- MULTIPLE LANGUAGE SUPPORT (UP TO 8 LANGUAGES)
- ANIMATED PowerPoint® STYLE PAGE TRANSITIONS
- SLIDEOUT SOFTKEY MENUS
- 500 ALARM POINT LOGGER
- COMPREHENSIVE REPORT GENERATION
- POWERFUL RECIPE HANDLING
- UNLIMITED PASSWORD PROTECTION
- REAL TIME CLOCK BATTERY BACKED
- FORM C RELAY OUTPUT
- EXPRESSION EVALUATION
- 32-BIT/FLOATING POINT MATH
- DIRECT NETWORK (Including Multiple Protocol) OR MODEM LINK TO PLC



EMC COMPLIANT



NEMA 4 / IP65



PARAMETER LOCKOUT



ALARMS



COMMUNICATIONS CAPABILITY

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FAX/WEB  
DOC# 07019

## Product Features

Model VX500 Operator Terminal combines unique capabilities normally expected only from expensive SCADA packages, with dramatic ease of use. The VX500 is configured using the same powerful EDICT97 Software as all Red Lion Paradigm Operator Interfaces. The result is savings in time to get challenging applications up and running, and frequent savings in hardware costs due to replacing many functions usually performed in separate expensive devices.

### POWERFUL DATA MANIPULATION

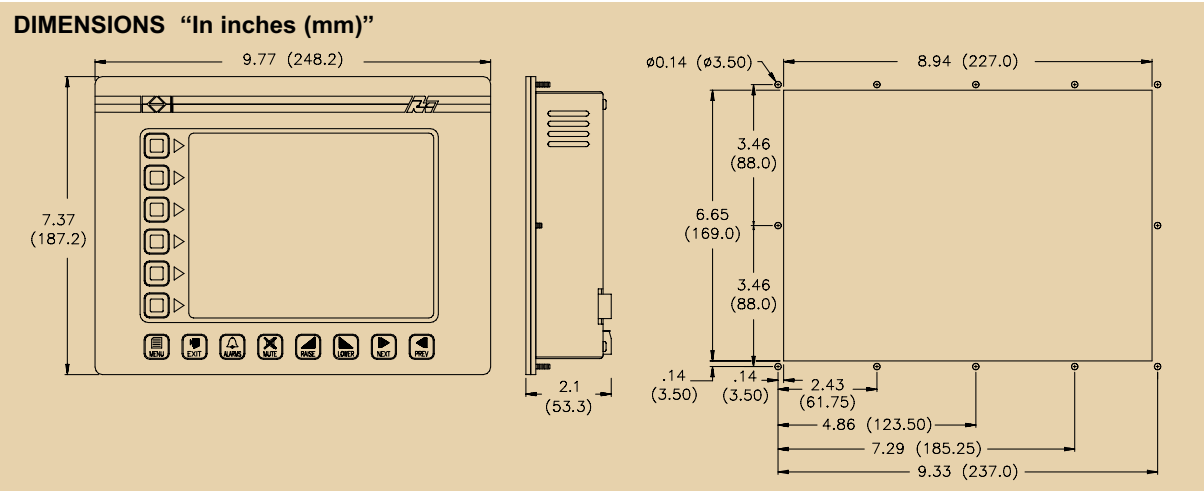
Model VX500 can perform 32-bit and floating point math functions. Values can be scaled, averaged, and signal linearization can be performed on inputs from non-linear sensors. Math expression evaluation can be used in any context throughout the Panel Configuration software, and the Alarm Scanner can trigger outputs to display, or pass derived outputs back to external serial devices. User Programs can be run utilizing 'C'-type language syntax for an infinite number of applications.

### MEMORY

A large amount of data can be stored in memory. Event logs can maintain date and time-stamped records of plant activity, as well as complete alarm histories. Large numbers of complex recipes can be stored in the panel much more economically than within a PLC.

### COMMUNICATIONS

As well as a clear, easily read display, permanent records can be sent to an attached printer, using the full-page report generator facility on board. Model VX500 can be connected to a wide variety of serial devices. Each of the multiple serial ports provided can be connected to devices utilizing different communications drivers. This enables information to pass back and forth concurrently between different brands of PLC, drives, bar-code readers, or Red Lion intelligent devices. Paradigm database structure uses Named Data, rather than Tag Names to enable changes of connected PLC type without the common need, with competitor's products, to re-write the application.



### Product Features Continued

Unlimited Password protection facilities allows user access to be precisely controlled.

Modem support enables systems to communicate with the world through the Operator Interface.

A unique database feature makes it simple to provide user-selectable language options for all display pages.

Interface Program downloads are fast. When developing applications, only changes are downloaded, saving valuable time.

#### DISPLAY

The Full-VGA color display supports object-oriented graphics, and bit-maps, thereby enabling mimics of plant functions. Data may be trended real time on the display. An optional enhanced display offers a 50% increase in brightness, and significantly improved viewing angles.

#### CONSTRUCTION

VX500 is robustly constructed for an industrial environment. With a metal enclosure with a non-corroding NEMA 4/IP65 front panel.

### General Specifications

- POWER REQUIREMENTS:** 15 VDC min. to 30 VDC max. @ 9.75 W  
**Power Up Current:** 2.5 A for 4 msec max.  
Must use a Class 2 or SELV rated power supply.
- DISPLAY:** 640 x 480 pixels (7.5 inch diagonal) CCFL Liquid Crystal DSTN color full VGA display. Text formats up to 40 x 30 characters. (VX500P00) Optional enhanced display with 50% increased brightness, and significantly improved viewing angles.
- KEYPAD:** 6 screen legendable soft keys, raise, lower, next, previous, exit, menu, alarms and mute keys are all embossed and have tactile feedback.
- MEMORY:** 736K (672K user) battery backed RAM (Battery life expectancy 3 years 50/50 on/off cycle).
- ENVIRONMENTAL CONDITIONS:**  
**Operating Temperature:** 0 to 50°C  
**Storage Temperature:** -20 to 80°C  
**Operating and Storage Humidity:** 20 to 80% max. RH (non-condensing) from 0°C to 40°C.  
**Altitude:** Up to 2000 meters
- CERTIFICATIONS AND COMPLIANCES:**  
**SAFETY**  
EN 61010-1, IEC 1010-1  
**ELECTROMAGNETIC COMPATIBILITY**  
Immunity to EN 50082-2  
Emissions to EN 50081-2
- PHYSICAL DIMENSIONS:** L = 9.77" (248.2 mm), H = 7.37" (187.2 mm), D = 2.1" (53.3 mm).
- CONSTRUCTION:** Metal enclosure with NEMA 4/IP65 front plate when correctly fitted with the gasket provided. This unit is rated for NEMA 4/IP65 indoor use. Installation Category I, Pollution Degree 2
- FIELD CONNECTIONS:** Removable screw terminal blocks.
- WEIGHT:** 2.94 lb. (1.33 Kg.)

### Input/Output Communications

- SERIAL PORTS:** Data Format and Baud Rates for each port is individually software programmable up to 19200 baud.  
**Port 1:** Programming Port - RS-232 on an RJ-11 jack.  
**Port 2:** RS-232 Port on a Plug-In Screw Terminal Block  
**Port 3:** RS-485 Port on a Plug-In Screw Terminal Block (Up to 20 units can be connected and individually addressed.)  
  
*Note: LED Indicators show communications status on Ports 2 & 3*
- RELAY OUTPUT:** Form C relay output 1/2A @ 125VAC, 1 A @24 VDC
- COMMUNICATION MODES:** Any of the three serial ports can be used to communicate with Serial Devices.  
Model - VX500 may communicate in Master mode with a different device protocol on each port (*See Note*)  
Ports 2 and 3 may be configured as different device protocols in Master mode and Port 1 may be used simultaneously in Slave mode for a third device protocol.  
However, only one of Ports 2 and 3) may be configured, if either is selected as a Slave protocol.  
  
*Note: Except if Allen Bradley DH485 is selected on either Port 2 or 3, in which case only Port 1 will be available for a separate Device Protocol.*

### Ordering Information

MODEL NO.	DESCRIPTION	PART NUMBER
VX-500	640 X 480 CCFL, Full VGA Color, 40 X 30, 6 Soft keys, 736 K memory	VX500000
	640 X 480 CCFL, Full VGA Color, 40 X 30, 6 Soft keys, 736 K memory, Enhanced Display version	VX500P00
	EDICT-97 Development Kit. Includes Software, Manual and 9-pin RS232 Programming cables	SFEDT
	Communication Cables	P895xxxZ