Operator nterface

MODEL CL20 - PARADIGM 4 X 20 LCD O. I.













• DIRECT, NETWORK (One family of PLCs) OR MODEM LINK TO PLC CONTROL SYSTEM

4 LINE X 20 CHARACTER LIQUID CRYSTAL

COMPREHENSIVE REPORT GENERATION

UNLIMITED PASSWORD PROTECTION

REAL TIME CLOCK, BATTERY BACKED

EXPRESSION EVALUATION

32 BIT / FLOATING POINT MATH

DISPLAY WITH LED BACKLIGHT 250 ALARM POINT LOGGER

RECIPE HANDLING



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DOC# 07006

Product Features

Model CL20 Operator Terminal combines unique capabilities normally expected only from high-end units, at a very affordable price. The CL20 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 CL20 can perform 32-bit 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 CL20 can be connected to a wide variety of serial devices. It can communicate simultaneously with one or more PLC's on one port, and Red Lion intelligent devices on a second port. 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.

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 userselectable language options for all display pages.

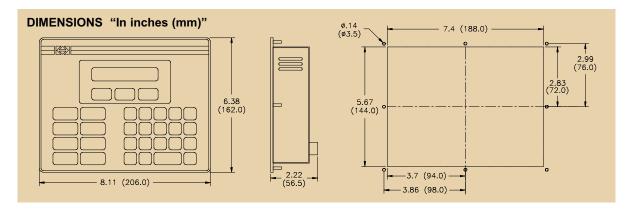
Interface Program downloads are fast. When developing applications, only changes are downloaded, saving valuable

FUNCTION KEYS

The panel incorporates a number of software programmable function keys. Some of the keys may be uniquely legended by applying supplied user printable labels into a slot behind the NEMA 4 rated front panel.

CONSTRUCTION

CL20 is robustly constructed for an industrial environment. With a metal enclosure with a non-corroding NEMA 4/IP65 front panel.





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General Specifications

1. POWER REQUIREMENT: 11 min. to 30 max. VDC @ 3.0 W Power Up Current: 3.0 A for 1msec. max.

Must use a Class 2 or SELV rated power supply.

- 2. DISPLAY: 4 lines of 20 characters, 0.197" (5 mm) high liquid crystal display with bright LED backlight (with on/off software control)
- 3. KEYPAD: 3 screen legendable soft keys, 8 User re-legendable function keys, numeric pad with raise, lower, next, previous, enter, delete, exit, alarms and mute keys, all with Tactile feedback
- 4. MEMORY: 128 K (64 K user) battery backed RAM (Battery life expectancy 10 years). Optional factory fit expansion to 256 K (192 K user)
- 5. **PHYSICAL DIMENSIONS**: L = 8.11" (206 mm), H = 6.38" (162 mm), D = 2.22" (56.5) mm.
- 6. 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

- 7. FIELD CONNECTION: Removable screw terminal blocks.
- 8. ENVIRONMENTAL CONDITIONS:

Operating Temperature: 0 to 40°C

Storage Temperature: -20 to 80°C

Operating and Storage Humidity: 80% max. relative humidity (non-condensing) from 0°C to 40°C.

Altitude: Up to 2000 meters

9. CERTIFICATIONS AND COMPLIANCES:

SAFETY

EN 61010-1, IEC 1010-1

UL Recognized Component, File #E179259

Recognized to U.S. and Canadian requirements under the Component Recognition Program of Underwriters Laboratories, Inc.

ELECTROMAGNETIC COMPATIBILITY

Immunity to EN 50082-2 Emissions to EN 50081-2

10. WEIGHT: 2.1 lb. (0.95 Kg)

Input/Output Communications

- 1. 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

2. COMMUNICATION MODES: Any of the three ports can be used to communicate with Serial Devices. The CL20 may utilize one device protocol to operate as either a Master or Slave, on one port. If required the CL20 may simultaneously communicate to Red Lion Serial devices, or a printer on a

Ordering Information

MODEL NO.	DESCRIPTION	PART NUMBERS
CL20	LCD, 4 X 20, 8 Function, 3 Soft keys, 128 K memory	CL200000
	LCD, 4 X 20, 8 Function, 3 Soft keys, 256 K memory	CL200010

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