# PANELMATE 500



**ELECTRONIC OPERATOR INTERFACE** 



**Cutler-Hammer IDT** 

FAICN

The PanelMate® Series 500 is a new concept for small machine control...a low cost electronic operator interface with a new dimension in capabilities — intelligent onboard operator guidance.

#### YOU NEED A LOW-COST OPERATOR INTERFACE

## The PanelMate 500 Delivers.

#### A NEW CHOICE FOR SMALL MACHINE BUILDERS.

Until now, machine builders needing a low cost operator interface had few choices — hardwired pushbutton panels or perhaps a message display-based unit with some limited function key capabilities. The PanelMate Series 500 gives you a new choice — a low cost unit that is powerful enough to fully address all five critical phases of machine operation.

The PanelMate Series 500's appeal isn't limited to just its power. Everything about the 500 is designed for versatility and machine builders' confidence.

#### - IMPROVE PRODUCTIVITY.

The PanelMate Series 500 greatly reduces PLC logic requirements, saving development and integration time. The Virtual Mentor™ guides novice operators through the system, providing step-by-step assistance with startup and shutdown sequences, and even troubleshooting and clearing machine faults.

#### - EASY-TO-CUSTOMIZE FACEPLATE.

Function keys are easily relabeled and are sealed under a removable keypad overlay. For a complete custom look, machine builders can request unique faceplates to match their applications.

#### -TOTALLY FLEXIBLE WINDOWS®-BASED CONFIGURATION.

Design your application to operate exactly the way you want, with WYSIWYG confidence. The 500 supplies the tools, you supply the know-how using the 500's easy, fill-in-the-blank configuration format.

#### - A PROVEN, EXPERIENCED SUPPLIER.

The PanelMate Series 500 is a product of the same minds that invented PanelMate, the first electronic operator station. Since 1986, PanelMate products have led the charge for easier, faster, better ways to help machine builders and users operate their PLC-based machines. Today, the PanelMate Series 500 takes small machine builders to the next step: total machine operation.

#### A PRICE TAG STARTING UNDER \$750.

For the cost of a plain message display and a couple of pushbuttons, you can buy a PanelMate 500 capable of completely revolutionizing the way you operate your machine.

## THE PANELMATE SERIES 500 -

SO VERSATILE, SO INTELLIGENT, SO COST-EFFECTIVE, YOU CAN PUT THEM EVERYWHERE.

IT STANDS TO REASON THAT THE BEST PERFORMING SMALL OPERATOR INTERFACE WOULD BE PART OF THE BEST LINE OF OPERATOR INTERFACE PRODUCTS AVAILABLE — PANELMATE. AT LESS THAN \$750, THE PANELMATE 500 IS AN UNMATCHED COMBINATION OF PRICE AND PERFORMANCE.

## INTELLIGENT, ONBOARD OPERATOR GUIDANCE.



Using a new technology, the PanelMate Series 500's available Virtual Mentor™ interactively leads your operator through all five

critical machine phases, eliminating confusion and increasing production. Here's how:

**STARTUP** — The PanelMate 500 leads the operator through the startup procedure and allows him to initiate any operation. Virtual Mentor guidance assures all procedures are followed in the correct sequence. On-screen, text-based templates or definable function keys replace hardwired devices.

**RUN** — The 500 monitors display the machine status and production process. Text-based message displays, readout and indicator templates keep the operator informed.

**CHANGE** — The 500 leads the operator through the change procedures and allows him to safely change allowable parameters of machine operation. The 500's Virtual Mentor displays available choices for initiating a change and ensures all required procedures are followed.

PROBLEMS/TROUBLESHOOTING — The 500 alarms the symptoms, leads the operator to the cause and through problem resolution, and then initiates normal operation. Using Virtual Mentor Intelligence, operator responses are combined with PLC register data to determine the cause of a problem. Once diagnosed, the 500 guides the operator in restoring normal operation.

**SHUTDOWN** — The 500 confirms operator shutdown decisions and leads him through the appropriate procedures.

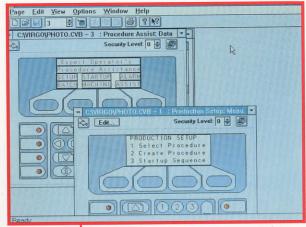
Available Virtual Mentor™ provides complete guided operator assistance.



Full alarm capabilities using either LEDs or text-based messages.



Choice of displays:

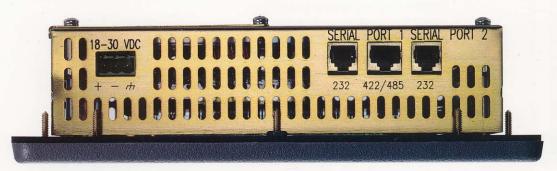


WYSIWYG (What You See Is What You Get) Windows-based software provides easy fill-in-the-blank configuration, and complete documentation of your system.

Replaces hardwired indicator lights with up to 8 built-in tri-color (red, yellow, green)
LED indicators, plus as many text-based, template-style indicators as you need.

Replaces hardwired pushbuttons using dedicated buttons, plus as many text-based template-style pushbuttons as you need.

Faceplate allows customization of labels for unique appearance or specialized functions.



### DISPLAY AND ELECTRONICS SPECIFICATIONS

#### Displays

- LIQUID CRYSTAL DISPLAY WITH 2X20 CHARACTER RESOLUTION
- LIQUID CRYSTAL DISPLAY WITH 4X20 CHARACTER RESOLUTION
- VACUUM FLORESCENT DISPLAY WITH 2X20 CHARACTER RESOLUTION
- VACUUM FLORESCENT DISPLAY WITH 4X20 CHARACTER RESOLUTION

#### **LED Indicator Lights**

TRI-COLOR LEDS: RED, YELLOW AND GREEN

- FOUR LEDS ON 2X20 MODELS
- EIGHT LEDS ON 4X20 MODELS

#### **Operator Entry**

- 4 MEMBRANE SOFT FUNCTION KEYS
- 8 RELABELABLE MEMBRANE FUNCTION KEYS
- 0 TO 9, +, -, •, NUMERIC ENTRY KEYPAD
- NEXT PAGE, PREVIOUS PAGE, LEFT, RIGHT AND HOME PAGE NAVIGATION KEYS

#### Hardware

FULLY ASSEMBLED FOR EASY PANEL MOUNT AND SERVICE

- THERMOSET POLYESTER/FIBERGLASS BEZEL
- ELECTRONICS MODULE WITH REMOVEABLE MEMBRANE KEYPAD AND INTEGRAL DISPLAY

#### **External Connections**

SERIAL PORTS: ONE SERIAL PORT IS STANDARD ON 2X20 DISPLAY MODELS. TWO SERIAL PORTS ARE STANDARD ON 4X20 DISPLAY MODELS.

- SERIAL PORT 1: SELECTABLE RJ11 FOR RS232 COMMUNICATION OR RJ45 FOR RS422 AND RS485-2 COMMUNICATION, 110 TO 19,200 BAUD, PERMITTING PLC BRAND-SPECIFIC PROTOCOL COMMUNICATION
- SERIAL PORT 2: RJ11 CONNECTION FOR RS232 COMMUNICATION PERMITTING COMMUNICATION TO SERIAL PRINTER
- ACCELERATI/ON OPTION: DIRECT CONNECTION TO ALLEN-BRADLEY'S DATA HIGHWAY™, DATA HIGHWAY PLUS™ OR REMOTE I/O™
- GENIUS I/O OPTION: DIRECT CONNECTION TO GE FANUC GENIUS NETWORK
- BACPAC™ OPTION: PORTABLE FLASH MEMORY CARTRIDGE FOR DOWNLOADING OF CONFIGURATIONS
- MODBUS PLUS OPTION: DIRECT CONNECTION TO MODICON'S MODBUS PLUS NETWORKS

#### **ENVIRONMENT**

#### System NEMA Class

 DESIGNED FOR NEMA 4, NEMA 4X OR NEMA 12 INSTALLATIONS WHEN PROPERLY MOUNTED IN A CORRESPONDINGLY-RATED ENCLOSURE

#### System Ambient Temperature

- OPERATING: 0-50° C
- NON-OPERATING: -20-60° C

#### **System Vibration**

- OPERATING: 2G AT 10-500 HZ
- NON-OPERATING: 2G AT 10-500 HZ

#### **Relative Humidity**

• 20-85% NONCONDENSING

#### System Shock

- OPERATING: 15G
- NON-OPERATING: 30G

#### Altitude

- OPERATING: 10,000 FEET ABOVE SEA LEVEL
- NON-OPERATING: 30,000 FEET ABOVE SEA LEVEL

#### **Emissions**

CISPR 22 CLASS A-RADIATED AND CONDUCTED

#### **Noise Immunity**

• IEC 801-2, 3, 4, 6, 8

#### **OTHER**

#### **Power Supply**

- VOLTAGE: 18-30 VDC
- CONSUMPTION: 8 WATTS, 12 WATTS WITH OPTIONAL COMMUNICATION INTERFACE BOARD

#### **Equipment Heat Output**

- 8 WATTS (28.8 BTU/HR)
- 12 WATTS (43.2 BTU/HR) WITH OPTIONAL COMMUNICATION INTERFACE BOARD

#### Certifications

- UL LISTED
- CSA LISTED
- CE MARK AVAILABLE, CONSULT FACTORY

#### Dimensions/Weight

		INCHES	(MM)
	WIDTH:	8.83	(224.28)
•	HEIGHT:	7.63	(193.80)
•	DEPTH:	3.23	(82.04)
- 2			

WEIGHT: 5 LBS.



#### **Cutler-Hammer IDT**

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