

EATON | Cutler-Hammer

PanelMate® Power Pro 5000 Models 5785K, 5785T, 5485K

Product Focus

- PanelMate Power Pro Capabilities
- Large 13" Color TFT Display
- Connectivity with Major PLCs



The Cutler-Hammer PanelMate Power Pro family of operator interface products by Eaton Corporation is rugged, reliable and easy to use. The PanelMate Power Pro 5000 operator interface has a thin profile that easily fits into a 6" deep panel enclosure and is less than half the weight of a typical 14" CRT display.

The PanelMate Power Pro 5000 features a large 13" color TFT flat panel display and is available in three configurations – touchscreen, integrated TouchPanel and split TouchPanel, each with five control buttons.

The touchscreen units come with an integrated resistive touchscreen interface, allowing for gloved hand operation. The TouchPanel models are perfect for harsh environments where touchscreens are not practical.

The PanelMate Power Pro 5000 models are cutout and mounting compatible with earlier PanelMate Power Series 4000 and 5000 models as well as the PanelMate I/II/III models. This makes it very easy to get the latest technology without having to spend time or money on cutting and drilling holes or upgrading cabinets and enclosures.

The 5000 models come loaded with many standard features. The security keyswitch can be used with or without software passwords to protect access to specific pages or critical operational changes. The fault relay can be used to provide feedback for loss of communications or power. And the alarm horn output can be used to drive an external horn that can provide alarm annunciation and operator pushbutton feedback. PanelMate's built-in two-touch control functions provide safe pushbutton or touchscreen control of motors, conveyors, presses, or other safety related equipment. In addition, the proprietary hardware design ensures fast boot-up and reliable operation.

The Power Pro 5000 continues PanelMate's tradition of supporting a wide array of industrial network protocols and PLC interfaces allowing quick and easy connection to a multitude of industrial control devices.

The Power Pro 5000 is configured with PanelMate Power Pro configuration software. This easy-to-use software includes the tools needed to develop graphic displays from the simple to the complex. To reduce development time, a graphic symbol library is included that contains over 3000 scalable and customizable

graphics. Other features include built-in support of complex math and logic expressions, alarm and event messaging, and page and device templates that further reduce development and debug time.

PanelMate Power Pro 5000 products are compatible with any application developed for other PanelMate Power Pro or Power Series products providing easy migration and reuse of your existing applications. This saves time and money.

If your application requires a robust yet powerful operator interface with a large display all combined in a rugged integrated package, then the PanelMate Power Pro 5000 is the right choice for you!

Typical Uses include:

- Machine Control/Monitoring
- Process Monitoring
- Local Operator Input Stations
- Unit Control/Monitoring
- Quality Control Station
- Kiosk Applications



General Features & Capabilities

- **Display**
 - ▲ 13.0" (330 mm), color TFT display, 256 colors
 - ▲ Resolution: Full VGA (640x480)
 - ▲ Brightness: 180 nits
 - ▲ Backlight: 50,000 hours typical life
- **Operator Entry**
 - ▲ TouchPanel model features
 - 5x3 cell TouchPanel for control selection
 - Numeric entry keypad
 - Five recessed membrane control buttons
 - ▲ Touchscreen model features
 - Resistive technology for gloved hand operation
 - 256x256 cell resolution
 - On-screen, 5x3 cell control selection or direct selection
 - Non-overlapping, pop-up, on-screen numeric keypad
 - Five on-screen control buttons
- **Hardware**
 - ▲ Single piece design for easy panel mount (split models have a separate TouchPanel module)
 - ▲ Electronics module with integrated display
 - ▲ Powder coated cold rolled steel or stainless steel front panels
- **Powerful OI Capabilities**
 - ▲ Common configuration software (Cat # PMPROSW) with PanelMate Power Series, Power Pro and ePro products allows for application migration and reuse.
 - ▲ Support of up to 200 display pages and no fixed limit on number of tags (limited only by memory).
 - ▲ Over 30 advanced data, math and logic functions.
 - ▲ Provides both "one-touch" and "two-touch" (for safety/critical operations) virtual pushbuttons.
 - ▲ Alarm handling with logged, event-triggered and warning capabilities.
 - ▲ Multiple password protection levels.
 - ▲ Symbol factory includes over 3000 customizable graphics for a range of industries/applications.
- **Communications Capabilities**
 - ▲ Supports serial drivers for a wide range of automation devices (consult business for current list):
 - Allen-Bradley Serial (DF1, DH-485)
 - AutomationDirect / PLC Direct
 - GE Fanuc Series
 - Cutler-Hammer D50/D32LT/D320
 - Mitsubishi

- Modbus ASCII/RTU
- Omron
- Reliance Automate
- Robox
- Square D
- Siemens
- Simatic TI
- Toshiba

Optional Communication Interface Modules Available

- ▲ Allen-Bradley DH/DH+/Remote I/O
- ▲ DeviceNet
- ▲ GE Fanuc GENius I/O
- ▲ Modicon Modbus Plus
- ▲ PROFIBUS DP

Product Specifications

Voltage

- ▲ DC Models
 - 24 VDC, -15% / +20%
- ▲ AC Models
 - 120 / 230 VAC, -15% / +10%

Power Consumption

- ▲ DC Models
 - 24 Watts (without comm. module)
 - 30 Watts (with comm. module)
- ▲ AC Models
 - 33 Watts (without comm. module)
 - 40 Watts (with comm. module)

Heat Output

- ▲ DC Models
 - 24 Watts (82 BTU/Hour) (without comm. module)
 - 30 Watts (102 BTU/Hour) (with comm. module)
- ▲ AC Models
 - 33 Watts (113 BTU/Hour) (without comm. module)
 - 40 Watts (137 BTU/Hour) (with comm. module)

Current

- ▲ DC Models
 - 1.2 A (without comm. module)
 - 1.5 A (with comm. module)

- ▲ AC Models
 - 0.40 / 0.20 A (without comm. module)
 - 0.50 / 0.25 A (with comm. module)

Peak Inrush Current

- ▲ DC Models
 - 9 A
- ▲ AC Models
 - 14 A

Installation Rating

- ▲ Approved for use in Type 4, 4X and 12 installations when properly mounted in a correspondingly rated enclosure

System Ambient Temperature

- ▲ Operating: 0 - 50° C (32 - 122° F)
- ▲ Non-Operating: -20 - 70° C (-4 - 158° F)

System Vibration

- ▲ Operating: 1 G at 10 - 500 Hz
- ▲ Non-Operating: 1 G at 10 - 500 Hz

System Shock

- ▲ Operating: 30 G
- ▲ Non-Operating: 30 G

Relative Humidity

- ▲ Operating: 20 - 95% non-condensing
- ▲ Non-Operating: 20 - 95% non-condensing

Altitude

- ▲ Operating: 10,000 ft (3,048 m) above sea level
- ▲ Non-Operating: 40,000 ft (12,192 m) above sea level

Emissions

- ▲ CISPR 22 Class A-Radiated and Conducted

Noise Immunity

- ▲ IEC 801-2,3,4,6,8
- ▲ IEC 61000-4-2,3,4,5,6,8

Agency Certifications

- ▲ CE Mark
- ▲ UL/cUL and CSA Class I, Division 2 Groups A, B, C, D certified

Model #	Overall Dimensions H x W x D	Cutout Dimensions H x W	Weight
5785K	19.22 x 19.00 x 3.84 in (488 x 483 x 98 mm)	17.74 x 17.40 in (451 x 442 mm)	24 lbs (10.89 Kg)
5785T	13.42 x 15.00 x 3.69 in (341 x 381 x 94 mm)	12.52 x 13.80 in (318 x 351 mm)	17 lbs (7.71 Kg)
5485K (Display Module)	13.96 x 19.00 x 3.84 in (355 x 483 x 98 mm)	12.44 x 17.60 in (316 x 447 mm)	21 lbs (9.53 Kg)
5485K (TouchPanel Module)	5.22 x 19.00 x .63 in (133 x 483 x 16 mm)	4.26 x 17.64 in (108 x 448 mm)	3 lbs (1.36 Kg)

Add 1.00 in (25 mm) to depth when using comm. module

Add 1.50 in (38 mm) to depth for power converter mounted on AC models

Add 1 lb (0.45 kg) to weight for each comm. module and power converter

Allen-Bradley is a federally registered trademark of Rockwell Automation. Cutler-Hammer and Eaton are federally registered trademarks of Eaton Corporation. GE Fanuc is a federally registered trademark of GE Industrial Systems. Mitsubishi is a registered trademark of Mitsubishi Electric Automation, Inc. Modbus is a trademark of Schneider Electric Industries SA. Omron is a federally registered trademark of Omron Corporation. Reliance AutoMate is a registered trademark of Rockwell Automation, Inc. Siemens is a federally registered trademark of Siemens AG. Square D is a federally registered trademark of SNA Holdings Inc. Simatic is a registered trademark of Siemens Energy & Automation, Inc. Toshiba is a federally registered trademark of Toshiba America Consumer Products, Inc.

Eaton Corporation
Cutler-Hammer business unit
1000 Cherrington Parkway
Moon Township, PA 15108
United States
tel: 1-800-525-2000
www.cutler-hammer.eaton.com

©2003 Eaton Corporation
All Rights Reserved
Printed in USA
Form No. PA04802007E / CSS 3039
May 2003

EATON

Cutler-Hammer