

t b m ELECTRONICA INDUSTRIAL
AUTOMATIZACION
CONTROL
INSTRUMENTACION
TBM S.R.L. - Maipú 2420 - 2000 - ROSARIO - ARGENTINA
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PowerPanel™

7 Patents Pending

G - Square Series

Screen design so simple,
even your CEO can do in minutes™

Prices so good,
your CFO would love it™

3 Year Warranty

DAZZLING GRAPHICS,
yet incredibly simple to use

FREE Software
and Upgrades

NEMA 4X, Class 1, Div II,
Stainless Steel Option

Customized features and
brand labeling for OEMs

Product Support from
your local distributor



Connectivity to Most Major PLCs
including DH+, Remote I/O,
Modbus+, Profibus & Ethernet

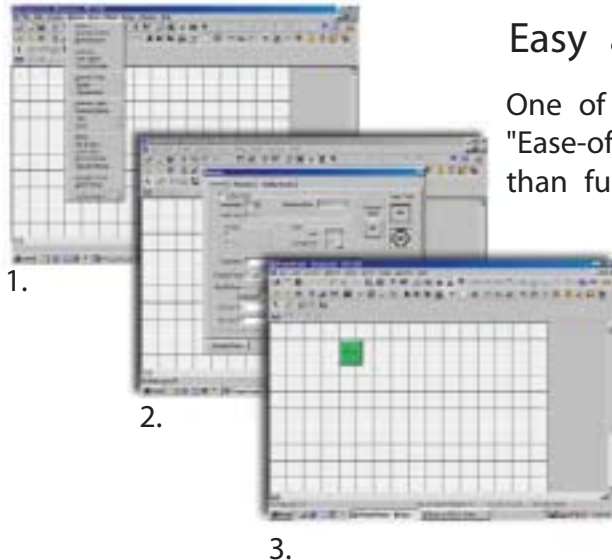
UTICOR
Quality on Display

PowerPanel G - Square Series

UTICOR is proud to introduce the new family of PowerPanel HMIs designed and manufactured in the USA. We call it the G-Square Series, because of its Great Graphics. These panels, designed from scratch for ease-of-use, are built to the same exacting standards and quality that you associate with other UTICOR products. No wonder, that new users' first comments are, "so simple to use", "built like a tank", "Wow!", or simply a big thumbs-up. We feel so confident about the quality and reliability of PowerPanel that we are offering a 3 Year Warranty on the product — an industry first.

Dazzling graphics with 128 colors

Though extremely easy to configure, the PowerPanel touch panels are not simply push-button pilot-light replacements. These panels provide you high-end panel components with compelling real-life looking graphics, that you would normally only expect on expensive PC-based software HMIs. With 128 colors, blinking of colors, and extensive bitmap support, the unit offers dazzling graphics that would please any discerning user.



Easy as 1-2-3

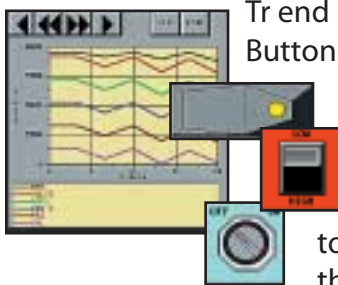
One of the key goals in the design of the new PowerPanels was "Ease-of-use." The new PowerPanel configuration software more than fulfills the design objective. The programming software for the panels is very intuitive, requiring virtually no learning curve. If you are familiar with Windows applications, you will be designing screens within minutes.

In addition to being simple to use, program has several built-in convenience features that will save you screen design time.

1. Select the component from menu or toolbar
2. Fill in the parameters (most parameters have default values)
3. Place and size the component

Advanced pre-built components

In addition to the Pushbuttons, Indicator lights & buttons, Numeric entry & displays, the PowerPanel offers panel components such as Analog Meters, PID Faceplate, Bar Graphs, Trend Graphs, Alarms, Recipe, Radio Buttons, Thumbwheel, a variety of Switches, and a rich library of bitmaps.



In addition, the user can select from a palette of 128 rich colors for all these components. Each color can be selected to blink to create components that will grab the operator's attention.



Versatile Bitmaps: More than 2000 Symbols

The PowerPanel Programming Software has flexible bitmap support. We can import bitmaps from the cli board, files, or from Symbol Factory. Symbol Factory provides you more than 2000 symbols arranged in convenient categories for your preview and selection.

Resize Bit maps without distortion

The PowerPanel editor allows you to resize bitmaps from within the editor without losing information—a feature not found on most HMI.



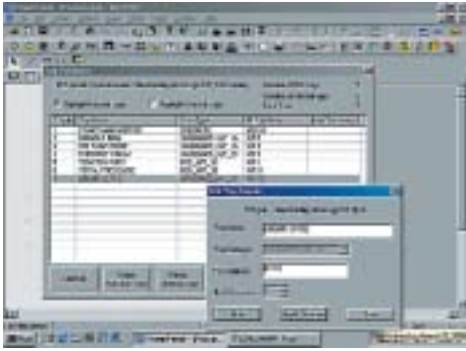
Powerful Alarming capabilities with alarm count display...

PowerPanel has sophisticated alarm capabilities to inform operators of unusual conditions in the machine or process. The PowerPanel can monitor up to 999 conditions for alarms. For each alarm condition, the PowerPanel can monitor either a discrete event (a bit), or a register value being out of range. The alarms can be selectively displayed (as a banner on the bottom of the screen), logged in alarm history, and/or printed on a serial printer. The PowerPanel has a unique feature to let you see the count of each logged alarm. This will help you eliminate nuisance alarms and focus on more critical alarms. Of course, you can view the chronological history of alarms as well as date and time stamp of each alarm.

Multiple language (up to 9) for export markets & multilingual operators...

With the PowerPanel's multiple language capabilities, you can now program the text for Panel components in up to 9-different languages. That means that your English reading operators can work with the panel in English, while the Spanish proficient operators can work in the Spanish language on the same panel. Also, with up to 9 different languages, OEMs exporting to other countries can develop programs to cover many of the commonly used languages.





Tag names for PLC addressing

The PLC addressing uses Tag names, so that you can associate meaningful, easy-to-remember names to the addresses. Additionally, Tags are useful if you use different PLCs with the same HMI program. You will need to design the HMI program only once, and then just change the Tag definitions to match the PLC you have to use—a time saving feature. You can export the Tag database to a CSV file or to excel application

Flash-based Firmware allows easy field upgrades

Flash plug-in Module for program backup & portability

PowerPanel G - Square series uses flash memory for it's firmware.

This allows you to upgrade the firmware in the field. You do not have to un-install the units, or send it to factory for any firmware upgrade. In addition, Power Panel supports an optional flash-based plug-in module. This module can be used to back up the user program and for portability of the user program. For example, OEMs can use the convenience of the plug-in module to distribute upgraded version of their programs to customers.



Fast download saves time...

Once you have designed your screens, writing to the panel is very simple and fast. Just select the COM port on the PC that is being used to connect to the panel. Since our program is highly optimized it takes far less time to transfer the program to the panel compared to several competing units.

Customization & Brand Labeling

As is evident from the ease-of-use and advanced features of the product, UTICOR has put many man-years in designing these panels. Although, we have packed most commonly used features in the product, UTICOR recognizes that no two-control systems are alike, and may require some special features not available in standard products. Keeping this in mind our engineers welcome customization opportunities for these panels.

Communication Drivers :

Allen-Bradley

- Data Highway Plus (DH+)
- Remote I/O
- DF1 for SLC 500 & Micrologix family
- DF1 for PLC5
- DH-485 for SLC 500 & Micrologix family
- DH-485 for PLC5

Modicon

- Modbus+
- Modbus RTU

Control Techniques:

- CT-ANSI driver

Siemens

- Siemens S-7 MPI

GE

- SNPX (90/30, 90/70 and Versamax)

Omron

- Hostlink

Mitsubishi

- FX Series

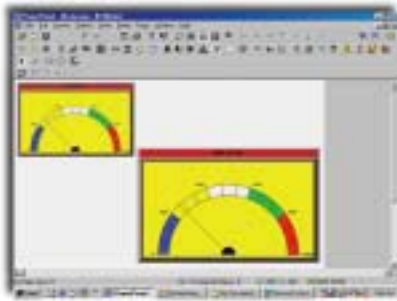
Open Networks

- Ethernet*
- Profibus*

* Available soon

UticorTough™ NEMA 4X, Class 1 Div II; Stainless Steel option

PowerPanel G - Square offers you the UticorTough quality. With NEMA 4X, Class 1 Div II ratings, these panels are very well suited for the harsh industrial environments. Optional stainless steel bezel is available for food and pharmaceutical industries.



Distortion-free Unlimited Scaling...

The PowerPanel uses vector-based designs for the panel components. This allows user unlimited scaling of the components without worrying about distortion. In addition to the distortion-free scaling, the vector-based designs use PowerPanel memory very efficiently, allowing almost 500 screens of reasonable complexity to fit within 512 KB of memory.

Connectivity to Major PLCs

DH+, Remote I/O, Modbus+, Profibus & Ethernet

The PowerPanel has connectivity to a variety of PLCs.

PowerPanels communicate with most major PLCs, such as Allen-Bradley, Modicon, Siemens, GE, Omron, Mitsubishi. In addition to the serial drivers, PowerPanels communicate on DH+, Modbus+ and Profibus networks. In addition to the serial drivers, PowerPanels communicate on DH+, Remote I/O, and Modbus+ networks. Support for Profibus, Ethernet/IP, Ethernet (Modbus TCP/IP), and other PLCs will be coming shortly.

Unique ON-LINE programming

PowerPanel's unique ON-LINE programming capability comes in handy to fine-tune your screens while the panel is running.

With ON-LINE programming— not found on many other panels — you work directly on the screens in the panel, allowing you to see the results of your design immediately.



G - Square Series

A complete family of 6" Monochrome, 6" Color, 8" Color and 10" TFT

PowerPanel G*Square series offers you a complete family of touch panel products to suit your applications. You can choose from the 6" Monochrome to 10" TFT color units. The editing program used to design the screens is the same for all the models.



QuickPanel, PanelView and PanelMate Users

No-cost Conversion Program

Uticor offers optional bezels that would allow you to use PowerPanel in an existing cutout of QuickPanel, PanelView, PanelMate and some other competing touch panel products. In addition, Uticor offers a no-cost program conversion from a competing product to PowerPanel for the quantity users. Please consult factory for the details of such conversion.

Specifications

(Common to all models):

Power Input: 20-30VDC (<18W @ 24VDC)
User Memory: 512KB with 512KB expansion module
Num.of screens: Up to 999 (limited by memory)
Com Ports: PLC Port -RS232C, RS422A, RS485A, 15 pin D-Sub (Female)
Program Port-RS232C, RS422A, RS485A, 9 pin D-Sub (Female)

Environmental

Storage temp: -20 to +60 deg C
Humidity: 10-95% R.H., Non-condensing
Vibration: 5 to 55 Hz, 2 G for 2 Hours in the X, Y and Z directions
Shock: 10 G for under 12 ms in the X, Y and Z directions
Electrical Noise: NEMA ICS 2-230 showering arc ANSI C37.90a-1974 SWC
Level C chattering relay test

PowerPanel G Square Series Models:

	6" Mono	6" Color	8" Color	10" Color
Display	4.72" x 3.5" 16 shades gray	4.65" x 3.5" 128 colors	6.65" x 5.024" 128 colors	8.31" x 6.22" 128 Colors
Screen Pixels	320 x 240	320 x 480	640 x 480	640 x 480
Op. Temp	0 to 45 deg C	0 to 45 deg C	0 to 40 deg C	0 to 50 deg C
Ext Dimensions	6.8 x 8.5 x 2.8"	6.8 x 8.5 x 2.8"	8.21x10.5x2.8"	10.1 x 13.1 x 3.04"
Panel Cutout	7.54 x 5.638"	7.54 x 5.638"	9.25 x 7.1"	11.922 x 8.938"

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PowerMarquee™ Models

Applying a Marquee Could not be Simpler!

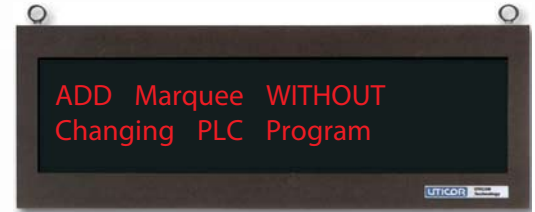


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PowerMarquee UPM Master (RED)

- 8 Standard sizes & custom sizes available (See Table A for Sizes)
- Variable character sizes on the same unit, selectable from 2", 4", 6", 8" and 8" narrow
- Up to 4 embedded data variables with 5 digits each per message from random registers
- Ability to display messages without touching PLC programs
- Connectivity to a variety of PLC networks
- Wall mount or hang. NEMA 12, NEMA 4X



PowerMarquee UPM Master (TriColor)

- Available in 1W4H, 2W4H, 4W4H. (See Table A)
- Rest of Features Same as above.



PowerMarquee UPM-MC (Message Controller)

- All the features of PowerMarquee UPM Master except: No display.
- For use with all slave marquees
- Ability to drive up to ??? Slave maquees

PMD 3000 RED/3500 TriColor Series Slave

- 8 Standard sizes & custom sizes available (See Table A)
- Variable character sizes on the same unit, selectable from 2", 4", 6", 8" and 8" narrow
- Driven by PC, PLC, Touch Panel, PMD message controller, or some intelligent device
- Wall mount or hang. NEMA 12, NEMA 4X, Stainless Steel



UPM-Slave RED & TriColor-Reduced Cost Slaves

- All the features of PMD3000, except different housing
- Available sizes for RED: 1W2H, 1W4H, 2W2H, 2W4H
- Available sizes for TriColor: 1W4H, 2W4H

PMD 1100 & 1200 Series (Slave)

- One line of 2" high 20 characters (1100) or 4" high 20 characters (1200)
- Stackable up to 8 high to create multi-line displays
- Driven by PC, PLC, Touch Panel, PMD message controller, or some intelligent device
- International character set
- Up to four Embedded variable data of 5 digits each
- Wall mount or suspend



PMD1400 (Slave)

- Driven by PC, PLC, Touch Panel, PMD message controller, or some intelligent device
- 4 or 6 digits, 7-segment, 4" high, visible up to 200 feet
- Selectable decimal point or colon
- Stackable up to 8 units high
- Clock/counter/timed printing options
- Wall mount or suspend



3000 Series Models

3100 RED & 3600 TriColor Master Marquee

- 8 Standard sizes & custom sizes available (See Table A for Sizes)
- Up to 4 embedded data variables with 5 digits
- Connectivity to a variety of PLC networks
- International Character Set
- Wall mount or hang. NEMA 12, NEMA 4X & Stainless Steel



3100 Master Marquee & PMD 300 MC Message Controller Additional Features

Blinking: A character, word, or message flashes at user programmed rate. Flashing messages attract more attention.

Chained Message: You can link up to 115 messages together, and display them at a user defined rate.

Circular Message Que: A list of messages that is displayed in the order that they are triggered according to their message display time. The list wraps around from the last message back to the first message and continue to cycle through the que until user makes a change.

Data Log: An area of memory set aside for a time and date-stamped historical record of events in the unit.

Invisible Message: Ability to send messages to a printer or Slave marquees, without displaying the same on the master marquee.

Realtime Clock: Marquees have built-in real time clock to display time. Eliminates the need to sending time information from PLC.

Scrolling Message: Marquees can scroll message from left to right, and from bottom to top.

Table A (N=Narrow)

Unit	Char. Size	# of Char.	# of Lines
1W2H	2"	20	2
1W2H	4"	10	1
1W4H	2"	20	4
1W4H	4"	10	2
1W4H	6"	6	1
1W4H	8"	5	1
1W4H	8" N	10	1
1W8H	2"	20	8
1W8H	4"	10	4
1W8H	6"	6	2
1W8H	8"	5	2
1W8H	8" N	10	2
2W2H	2"	40	2
2W2H	4"	20	1
2W4H	2"	40	4
2W4H	4"	20	2
2W4H	6"	13	1
2W4H	8"	10	1
2W4H	8" N	20	1
2W8H	2"	40	8
2W8H	4"	20	4
2W8H	6"	13	2
2W8H	8"	10	2
2W8H	8" N	20	2
4W2H	2"	80	2
4W2H	4"	40	1
4W4H	2"	80	4
4W4H	4"	40	2
4W4H	6"	26	1
4W4H	8"	20	1
4W4H	8" N	40	1

1W2H: 2 lines of 2"-high 20 characters, or 1 line of 4"-high 10 characters

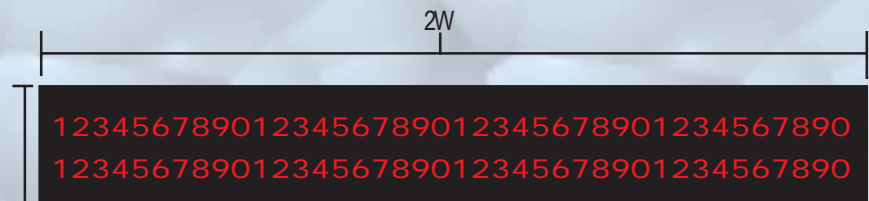
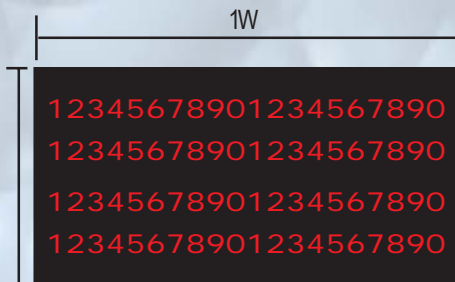
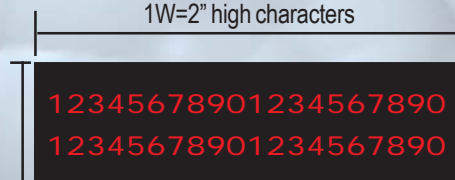
2H=2 lines of 2"-high characters

1W4H:

4H

2W2H:

2H



Uticolor's 3000 series (3000, 3050, 3100, 3500, 3600) & PowerMarquees are available in several standard sizes. The smallest size is called 1W2H as shown here.

1W refers to one-wide and equals 20 characters (each 2" high). 2H refers to two-high, and equals 2-line of 2" high characters, as shown below. The other sizes are multiple of the smallest size, such as 1W4H, 2W2H, etc.

The table shows all standard sizes and maximum number of lines and characters for each character height supported. You can display characters of different heights in the same line.

PowerMarquee™

Applying a Marquee Could not be Simpler!



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Quality Manufacturing Process

Matched LEDs for Uniform Brightness

Uticor uses specially matched LEDs for its marquee product lines. Because of matched LEDs, the brightness of LEDs remain uniform over the life of Marquee, making it pleasant to look at.

Uniform
Brightness

96 Hour Burn-in

Uticor Marquees offer the highest quality, uniformly bright LED display. In addition to selecting matched LEDs, Uticor product goes through a 96 hour burn-in period to eliminate infant mortality from more than 10,000 LEDs in the smallest marquee.

NEMA 12, NEMA 4X, & Stainless Steel Housings Available.



4 Year Warranty

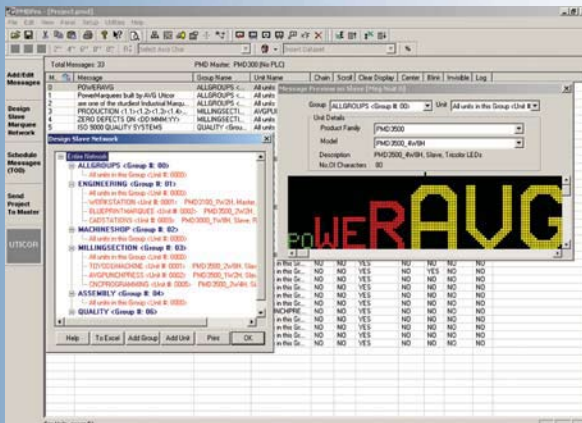
The high quality manufacturing process translates in years of trouble free service with consistent looking display. Uticor reliable manufacturing allows us to offer a FOUR YEAR warranty on all it's marquee products.

Connectivity

The PowerMarquee has connectivity to major PLCs and industrial networks, such as AB, Modicon, GE, Siemens, Mitsubishi, DH+, Profibus, etc.

FREE Windows Based Software.

UTICOR Marquees are programmed using a FREE and Easy, Windows based programming software. This software contains message import/export capabilities to other applications, making our displays more compatible with your company.



1100/1200/1400 Series

Stackable up to 8 High

Model	Dimensions (WxDxH)	# of Lines	Characters per Line	Character Height	Viewing Distance	Alpha/Numeric	Stored Messages	Interface
1100 Series (Slave) Note: Add 4.27" to H for each Additional Line								
1100	38.45x4.224x5.5	1-8	20	2"	100'	A/N	No	RS-422/485 / ASCII
1200 Series (Slave) Note: Add 6.52" to H for each Additional Line								
1200	74.453x4.224x7.75	1-8	20	4"	200'	A/N	No	RS-422/485 / ASCII
1205	38.453x4.224x7.75	1-8	10	4"	200'	A/N	No	RS-422/485 / ASCII
1400 Series (Slave) Note: Add 6.52" to H for each Additional Line								
1404	19.43x4.0x7.75	1-8	4	4"	200'	N	No	RS-232/422 Paralel Inputs
1406	28.23x4.0x7.75	1-8	6	4"	200'	N	No	RS-232/422 Paralel Inputs

3000 Models

3000/31xx/3500/36xx Models

Master: 31xx (Red), 36xx (Tricolor)

Slave: 3000 (Red), 3500 (Tricolor)

Unit	Dimension (W x H x D)	Character Height	Characters per Line	# of Lines	Weight
1W2H	40" x 11.5" x 4.25"	2" / 4"	20/10	2/1	47 lbs.
1W4H	40" x 16.3" x 4.25"	2" / 4" / 6" / 8" / 8N	20/10/6/5/10	4/2/1/1/1	65 lbs.
1W8H	40" x 25.9" x 4.25"	2" / 4" / 6" / 8" / 8N	20/10/6/5/10	8/4/2/2/2	101 lbs.
2W2H	76" x 11.5" x 4.25"	2" / 4"	40/20	2/1	81 lbs.
2W4H	76" x 16.3" x 4.25"	2" / 4" / 6" / 8" / 8N	40/20/13/10/20	4/2/1/1/1	112 lbs.
2W8H	76" x 25.9" x 4.25"	2" / 4" / 6" / 8" / 8N	40/20/13/10/20	8/4/2/2/2	178 lbs.
4W2H	150" x 11.5" x 4.25"	2" / 4"	80/40	2/1	189 lbs.
4W4H	150" x 16.3" x 4.25"	2" / 4" / 6" / 8" / 8N	80/40/26/20/40	4/2/1/1/1	250 lbs.

Connectivity

Model	COMM. Interface
Master Units	
3100/3600	RS-232/422/Paralel
3150/3650	Allen-Bradley Remote I/O
3160/3660	Siemens/TI Remote I/O
3170/3670	Modicon Remote I/O
3175/3675	Modicon Modbus Plus
3180/3680	GE Genius I/O
Slave Units	
3000/3500	RS-232/422

PowerMarquee™ UPM Series

Unit	Dimension (W x H x D)	LED Type	Char. Height	Char. per Line	# of Lines	Weight
1WX2H	37.05" x 7.28" x 4.18"	Red	2" / 4"	20/10	2/1	18 lbs.
1WX4H	37.05" x 12.08" x 4.18"	Red/Tricolor	2" / 4" / 6" / 8"	20/10/6/5	4/2/1/1	34 kbs.
2WX2H	73.25" x 7.28" x 4.18"	Red	2" / 4"	40/20	2/1	34 lbs.
2WX4H	73.25" x 12.08" x 4.18"	Red/Tricolor	2" / 4" / 6" / 8"	40/20/13/10	4/2/1/1	70 lbs.

PowerMarquee sizes 1W8H, 2W8H, 4W2H, 4W4H have the same dimensions as the 3000 Series models

Connectivity

Model	COMM. Interface
Master Units (Part #: UPM-xWXxH-.....)	
000x0	Serial Interfaces
000x1	Allen-Bradley DH+ / Remote I/O
000x4	Modicon Modbus Plus
000x5	DeviceNet
000x6	ControlNet
000x7	Ethernet Modbus TCP/IP
000x8	Profibus
000x9	Ethernet IP
Slave Units (Part #: UPM-xWXxH-.....)	
00100	RS-232/422/485
0010A	Ethernet

General Specifications for All Marquees

NEMA RATING: NEMA 12, NEMA 4X

Power Source: 115 VAC (102-132)
47-63 Hz 230
VAC (194-250) 47-63 Hz

Operating Temp: 0-60 C Ambient

Storage Temp: -40 to 95 C Ambient

Humidity: 10 to 95% RH, Non-condensing

Electrical

Interference: NEMA ICS 2-230
Showering Arc Test

Electrical

Tolerance: ANSI C37.90a-1974 (SWC)
Surge With-Stand Capability Test

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A Family of Character Based Operator Interfaces.

PowerText from AVG is a family of character-based operator interfaces. PowerText allows you to display messages, under PLC control, for machine/process status, operation and/or diagnostics. These messages can have embedded data to provide information to operators. In addition, PowerText can be used for data-entry; for example, for machine/process setup. Below are some of the example messages for which PowerText can be used:

RUN MODE	(Machine Status)
PROD 250/HR	
Temp too high	(Process Alarm)
Enter Parts qty:	(Data Entry)
12345	

Message Storage. In addition to PLC-controlled messages, the PowerText can also store “local” messages. These messages can be help messages for operators and can be grouped in folders for easy navigation. A LED clearly indicates if the displayed message is triggered from a PLC or is a local message.

PowerText models come in 5 Pushbutton keys and 4 navigation keys. The pushbuttons allow operators to set/reset bits in PLCs, while the navigation keys helps in navigating through messages, and in data entry.

Data Entry. The data entry can be inputted in two different ways—through the Inc/Dec keys or using numeric keypad (where applicable). Each of the pushbuttons can be independently programmed to behave as Toggle, Momentary, or Set by Push and Reset by PLC.

Indicator Lights. PowerText also comes with 5 indicator lights, which can individually be programmed to display status of Pushbutton, or a bit in PLC.

Powerful Connections. PowerText can communicate with most major PLCs, on market such as AB, Modicon, Siemens, GE, etc, using serial protocols.



PowerText Products

Preliminary Specifications

	UPT-2X20N-001	UPT-2X20L-001	UPT-4X20N-001	UPT-2X20K-001	UPT-SP000-001
Description	2x20 LCD display, five user defined pushbuttons, five LEDs	2x20 LCD display, large characters, five user defined pushbuttons, five LEDs	4x20 LCD display, five user defined pushbuttons, five LEDs	2x20 LCD display, numeric keypad, five user defined push buttons, three tri-color LED annunciators	1x16 LCD display, five control pushbuttons
Display Type	Character LCD, 2 lines by 20 characters w/LED backlight		Character LCD, 4 lines by 20 characters w/LED backlight	Character LCD, 2 lines by 20 characters w/LED backlight	Character LCD 1 line by 16 characters w/8 digit .52" LED numeric display
Character Height	5.55mm (0.22")	8.06mm (0.316")	4.75mm (0.187")	5.55mm (0.22")	8.06mm (0.316")
Keypad Overlay	5 user-defined pushbuttons and 4 Navigation control keys			5 user-defined pushbuttons and 4 Navigation control keys, and Numeric Keypad	4 Navigation control keys
Indicator LEDs	5 user-defined LEDs			5 user-defined LEDs, and 3 user-defined annunciators	
Input Voltage	24VDC (20-30VDC operating range)				
Power Consumption	4 Watts @ 24VDC	4.5 Watts @ 24VDC	4 Watts @ 24VDC	5.5 Watts @ 24VDC	6.5 Watts @ 24VDC
Enclosure	NEMA 4, 4X				
Agency Approval	UL, cUL, CE				
Operating Temperature	0° to 45°C (32° to 113°F)				
Storage Temperature	-20° to 60°C (-4° to 140°F)				
Humidity	10-95% RH, (non-condensing)				
Electrical Noise	NEMA ICS 2-230 showering arc ANSI C37.90a-1974 SWC Level C Chattering Relay Test				
Withstand Voltage	1000VDC (1 minute), between power supply input terminal and protective ground (FG)				
Vibration	5 - 55Hz 2G for 2 hours in the X, Y, and Z axes				
Shock	10G for under 12 ms in the X, Y, and Z axes				
Burn-in	Temperature cycled 96 hours and then fully functional tested				
LED/LCD Life	100,000 hours				
Serial Communications	Download/Program/PLC Port RS-232/RS422/RS485 15-pin D-sub (female)				
Dimensions (in/mm)	6.650x4.124"	9.250x4.124"	6.650x4.124"	9.250x4.124"	
Mounting cutout	5.910x3.712"	8.510x3.712"	5.910x3.712"	8.510x3.712"	
Weight (lbs.)	0.6	1	0.6	1	1
Number of Messages	256 (PLC as well as Local messages)				
Embedded Data/message	3 Variables per message (one read/write and two Read-only)				



**ELECTRONICA INDUSTRIAL
AUTOMATIZACION
CONTROL
INSTRUMENTACION**

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