

Tough Panel™

Industrially Robust, Intuitive, Simple to Program

Industrially Robust, NEMA 4X, Class I, Div II, Conformal Coated, Aluminum or Stainless Steel Panels

FDA Compliant

Hard surface Touchscreen with built-in Anti-glare film (0.090" Thick)

7 Models to Choose

Identical programming and features; you select the size and display most appropriate for the application, without concern for programming changes

Competitively Priced



Displays with High-end brightness (300-450 Nits for TFT) and Wider viewing angle (60 degrees)

Outdoor Readable Panels

Toughpanels are available in a new Transflective Technology producing low heat.



Multiple Languages

Program the text for Panel components in up to 9-different languages



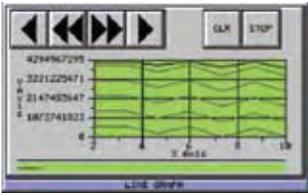
Unicode Language

Toughpanels are now provided to display text in any language supported by "Unicode".



Conformal Coated

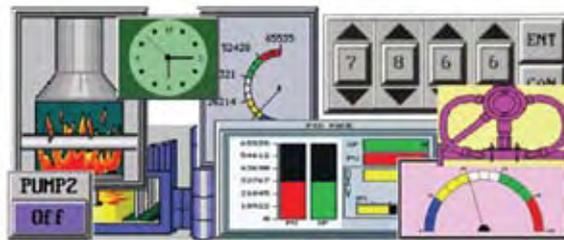
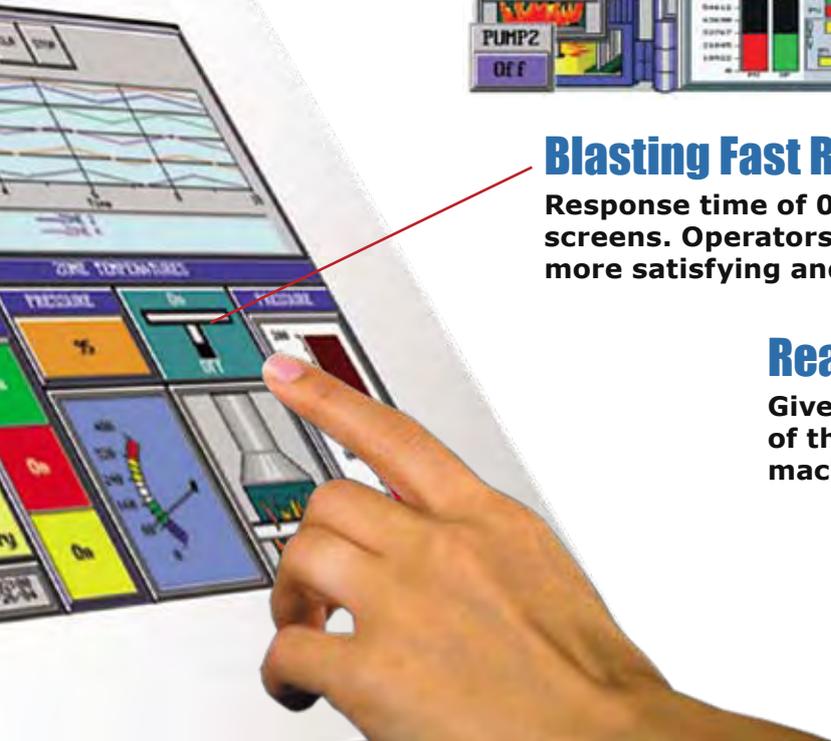
High-End SCADA and Uniquely Innovative Features without needing an Industrial PC!



Trend Graph / Data Acquisition / Scripting

Track up to 6 variables in one trend graph. Acquire and store data. Perform statistical process control. Scripting allows Logical and Mathematical Operations on PLC data.

Dazzling 3D Graphics



Operator Friendly

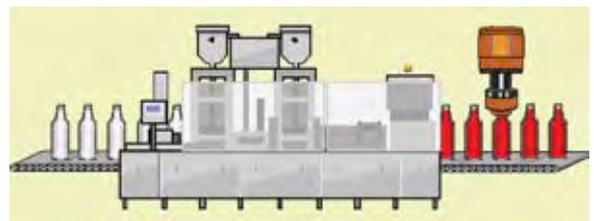
Toughpanels have the best looking pre-built as well as multi-state bitmap objects.

Blasting Fast Response to Touch Input

Response time of 0.75 sec to touch inputs even for complex screens. Operators have almost immediate response for a more satisfying and efficient experience

Real Time Animation

Give machine operators a better understanding of the machine process by animating the machine's motion or process on the screen



Higher Temperature rated Display

Toughpanels displays have a typical rating of 55° C

Longer Bulblife

Toughpanels have the best specifications for bulblife 50,000 - 60,000 hours of operation

Exclusive

Drop-in, Plug-n-Play Replacement for those Obsolete and feature-limited Touchpanels.



Same foot-print

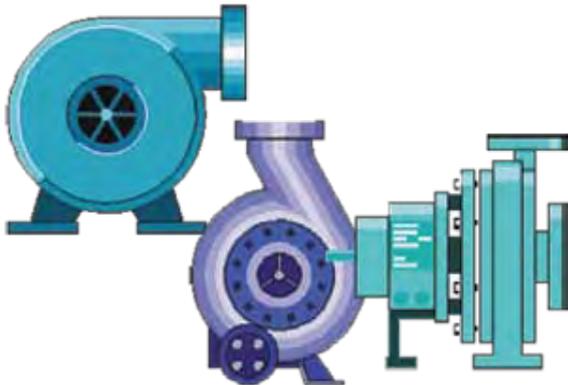
Toughpanels offer Drop-in replacement for Allen Bradley Panelview and Panelview Plus, as well as General Electric's Quickpanels (also Proface GP Series). Program conversion cost is minimal.

Tough Panel™

Industrially Robust, Intuitive, Simple to Program

FREE 4,000 Symbol Library

Built in library of 4,000 objects available for you to copy and paste directly to a project screen and use them in any arrangement or position them just the way you like.



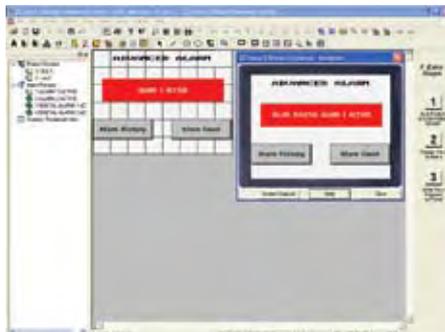
Built like a ^{Smart} Tank



Advanced Alarming

Advanced Alarm System comprises:

- Alarm Database
- Alarm Preview
- Alarm History
- Alarm Count
- Alarm Protection
- Send Alarm to Marquee and lot more.



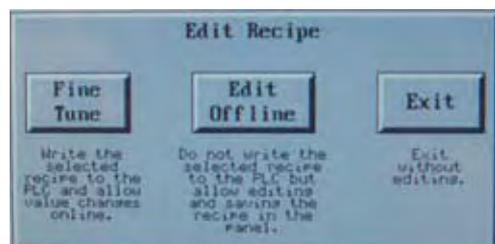
Multi-state Indicator & Bitmap Buttons

The Multi-state indicators allow you to visualise process conditions such as three states of a traffic light. Toughpanel also offers bitmap based multi-state indicators where you can use up to 256 bitmaps to indicate 256 different conditions.



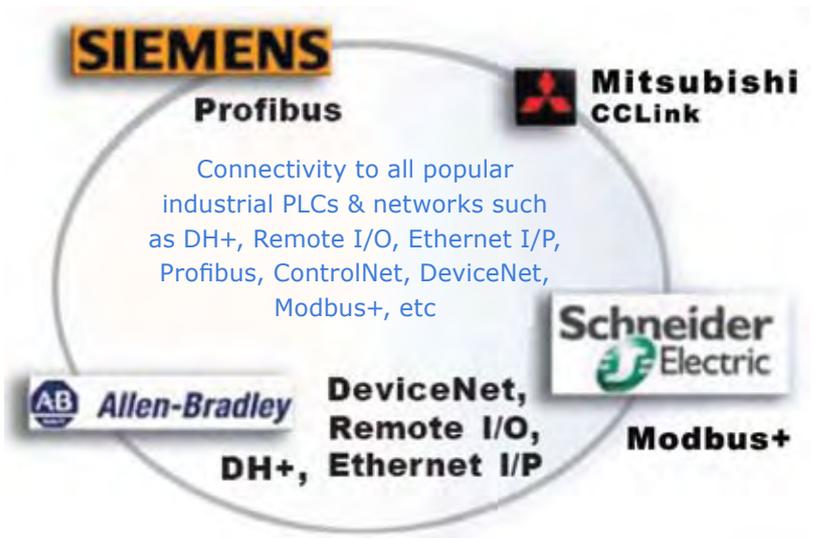
Unique On-Screen Recipe Edit

Fine-tune and Edit Recipe without Laptop



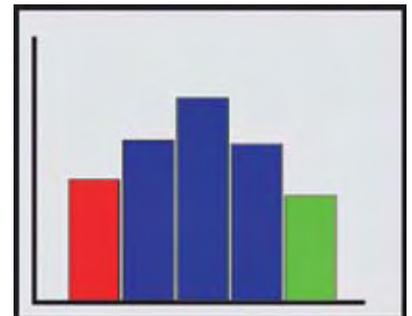
High-End SCADA and Uniquely Innovative Features without needing an Industrial PC!

Most PLC and Network Protocols Supported with **Dual Driver Capability**



Statistical Process Control (SPC)

Toughpanel can perform a variety of Statistical computations such as Cpk



Exclusive

Net-View and Control

Toughpanels allow you to view and control the touch-panels anywhere in the world via the internet. Allows for immediate trouble shooting worldwide without leaving the office.





Additional Features in...

Show Training Video

View MPEG videos for installation/training, Machine/process changes, etc..



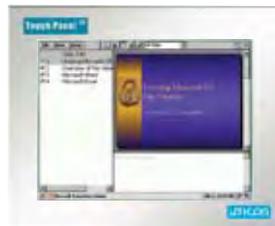
View PDF Manuals

Have fast and immediate access to PDFs for manuals on machine/process.



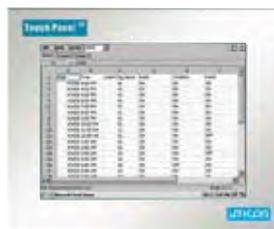
View Power Point Presentations

View Powerpoint presentations for Weekly/Monthly Maintenance walk-throughs, Machine/process changes, etc..



View Excel Files

View Microsoft® Excel files, review/analyze data on the screen instead of sending it to the computer



View Word Documents

View Microsoft® Word Documents to review/analyze files right on the screen instead of sending it to the computer



Choice of Dedicated Processor or Windows Processor

Toughpanels have a choice of dedicated or windows processor for different applications. See pages 34 and 35.



Windows CE® Functions

Microsoft Terminal Services

FTP server for sending to/receiving file from remote location

...Toughpanels with a Windows CE® Processor



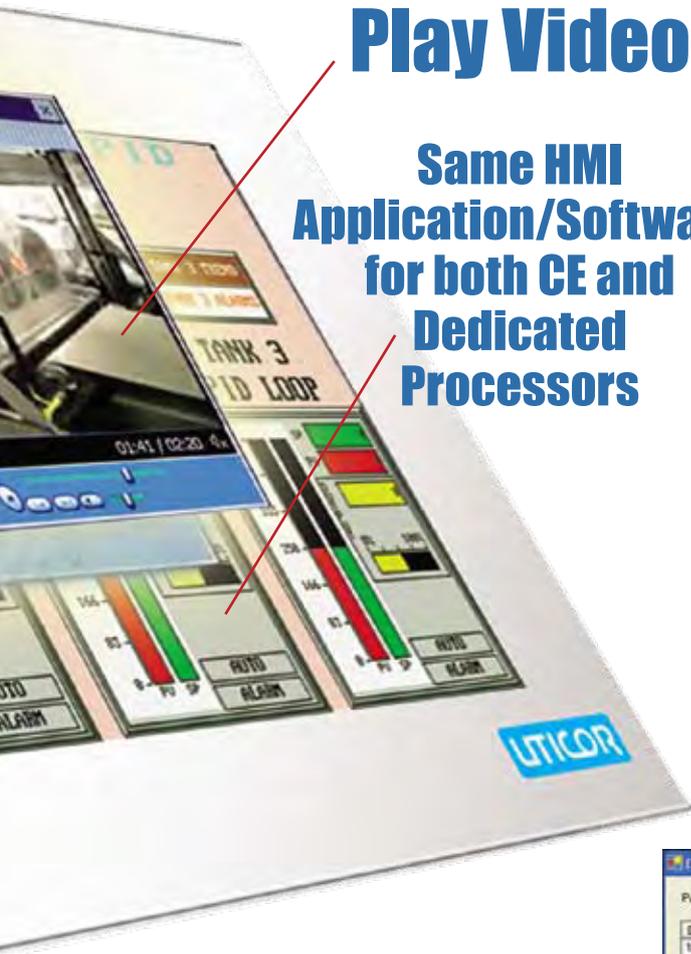
Unique Built-in Quick Edit

Change your HMI Application... on the HMI itself, NO MORE LAPTOPS!

- Make a Quik-Edit™ to existing objects, screens, etc. in seconds...e.g. change colors, sizes, tag/ address associations and more...
- Add/Delete objects, screens, etc.

Play Video

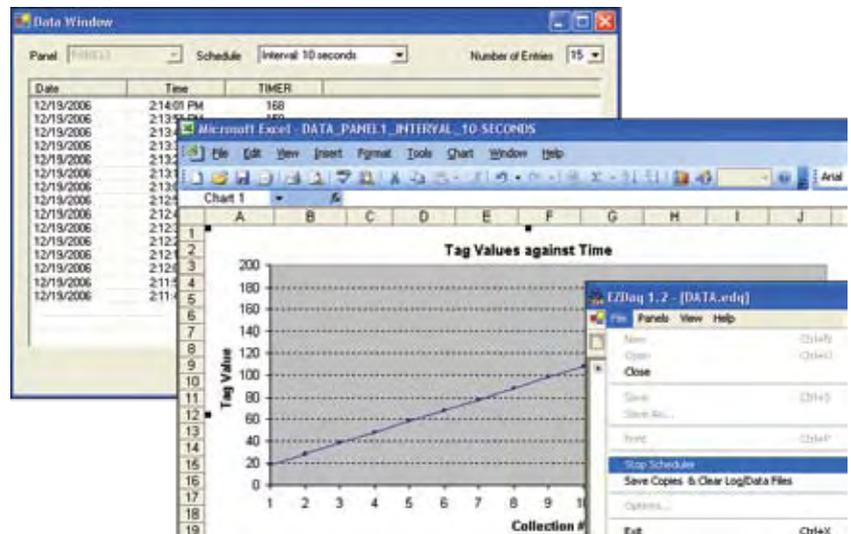
Same HMI Application/Software for both CE and Dedicated Processors



Additional Hardware Features

- AMD Alchemy 333 MHz CPU
- 32 MB Flash, 64MB RAM
- Compact Flash Slot
- 10/100 Base-T Ethernet with PLC protocols
- One RS232 Port, One RS232/422/485 Port, One USB Host Port
- Network Card Option
- Light weight / Low Power
- Complete NEMA 4, 4X Industrial Ratings

Built-In Data Acquisition Software, stores data in Compact Flash in ".csv" file format

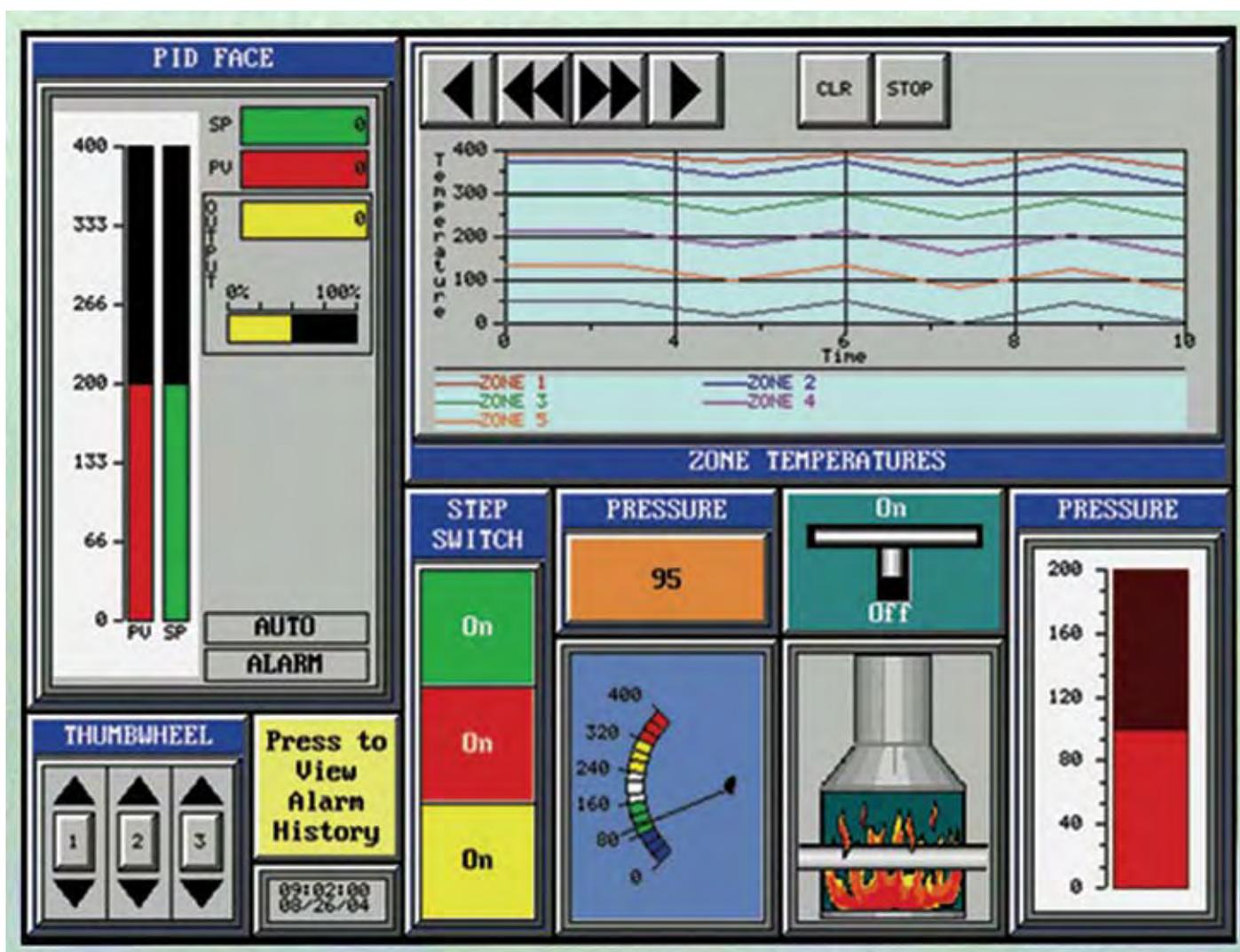


uWin⁰⁸ Editor, Simply the Most Intuitive Programming Software in the World!!

No training manual, no class-room, self-learn in less than 30 minutes!!

uWin⁰⁸ Editor has full 32-bit windows attributes to develop screens in the shortest time. The programming software is very intuitive, requiring virtually No-Learning curve. If you are familiar with windows applications, you will be designing screens within minutes. Many new convenience features have been added to make the software even better.

Program this screen in less than 10 minutes Simple as 1-2-3



We made an easy to use, simple operator interface that will save you a lot of engineering hours and design time due to its simplicity and ease of use. You don't need prior programming knowledge to design a screen. You do not need to attend any classes to learn how to program the Toughpanel. It is Intuitive, it is Simple!

uWin⁰⁸ Programming Editor

Screen Design so Simple, even your CEO can do it in minutes™

It's as Simple as **1-2-3**
to Create an Object

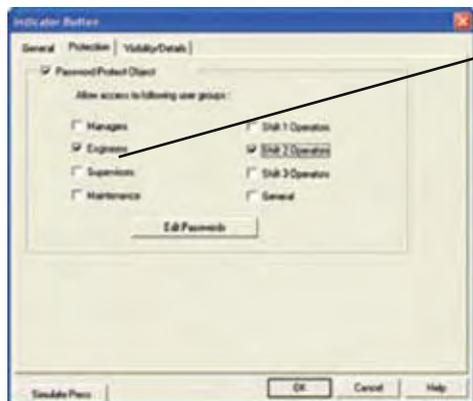
1 Using the Objects pull-down menu or an icon in the toolbar, select the object you want to create. In this example, we are creating an Indicator button.



2 Every object has an associated dialog box, as shown to the right. The different tabs at the top contain all the prompts for creating the object for your specific needs.

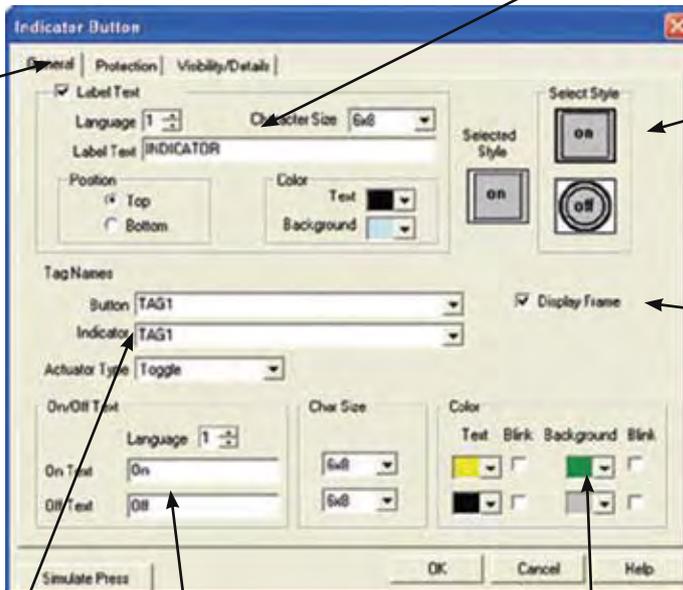
Object configuration dialog box
(Options vary upon object selected)

Custom label your objects to ensure that the objects purpose won't be mistaken.



Password Protection

Allow only authorised users or certain groups the appropriate level of access with password protection, as shown above.

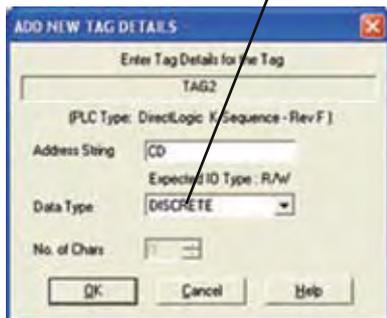


Select the style in how you want your object to appear on the screen.

Display frame gives an object that desired 3D appearance, which can help differentiate it as a button. (Example shown at step 3)

PLC Addressing

Type in the tagname and then right click on the name you just typed. This will bring up the dialog box to the right, to enter the appropriate PLC address string and data type, which determines how the object links to the PLC.



Color Palette

With 128 available colors for an object's text, background, label and more, making an object stand out or look as part of an organized grouping or category is easier than ever.



Nine Different Languages

With Toughpanel's multiple language capabilities, you can now program the text for Panel components in up to 9-different languages. This means 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.



3 Once you are done creating your object, simply click OK and then click on the screen. Resize and move your object as needed. If you feel an edit is necessary, no problem! Double click the object and the dialog box will reappear. It's that EZ!!



with Display Frame



without Display Frame

uWin⁰⁸ Programming Editor

Display of Tag Addresses on Objects

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 only need to design the HMI program once. Then just change the tag definitions to match the PLC you are using.

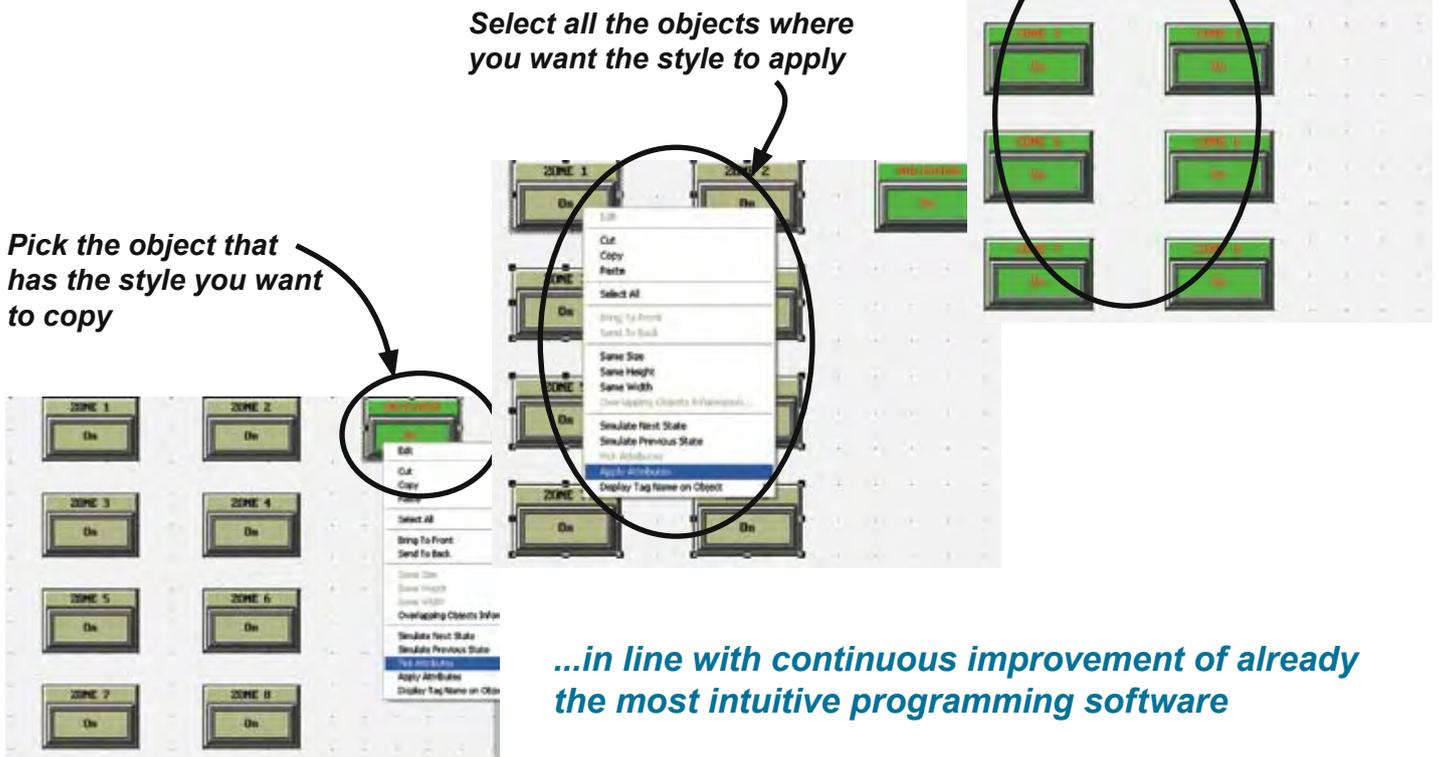


The enhanced ability to display tag addresses on the objects allows simpler screen development and troubleshooting. Here we are showing the tag address for block transfer on AB's Remote I/O.

Pick and Apply Styles...

When designing screens, there are many attributes assigned to objects, such as object's colors, object's shapes, text sizes, text colors. All these details in completing a style for the screen takes a great deal of time. This feature allows the ability to "copy and paste" these styles from one object to as many as you select. Another wonderful time saving feature!

The object's style that was picked has now been applied to the other objects



...in line with continuous improvement of already the most intuitive programming software

uWin⁰⁸ Programming Editor In Continual State of Improvement

Project Simulation

1 What is Project Simulation?

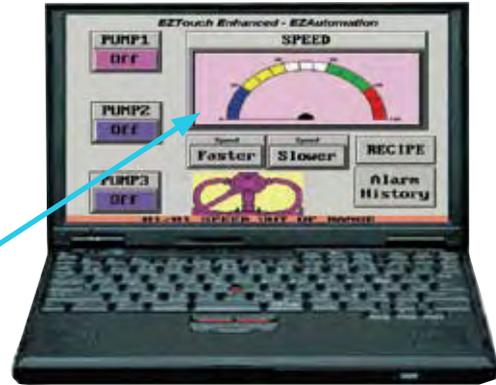
This feature allows you to simulate, interact, navigate and debug an entire project right on your PC, before you transfer it to the panel. To be precise, it ensures that your project looks and operates exactly the same way you intended.

2 How to Interact with the Objects?

On the PC you will have to click on the objects, as you do touch/press them on the panel.

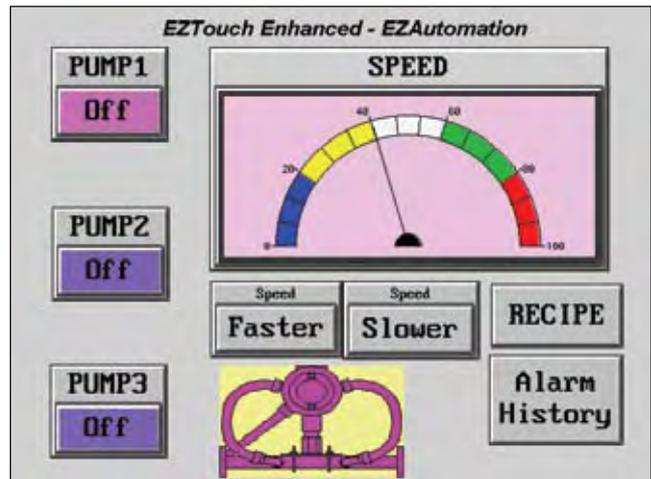
3 How to Test the functionality of the Objects?

By changing the tag values of the objects and view their responses. Tag values can be changed either in the tag list or in the separate dialog boxes by right-clicking individual objects.



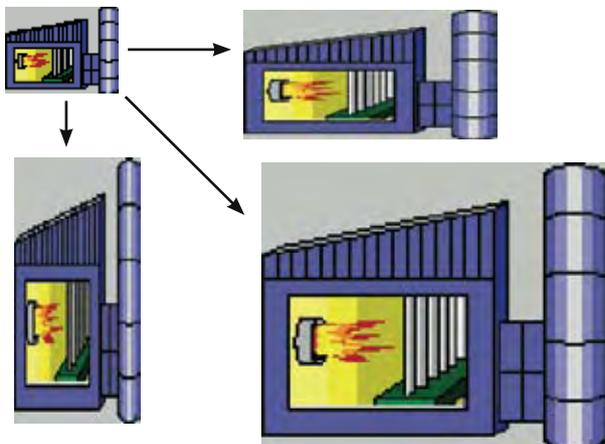
4 What is the purpose of Screen Capture?

This is an option to take the screen shots of the simulator screens and save them for further references. Basically, screen shots give you an idea that how the panel screens will look like?



Distortion Free Sizing of Objects

The uWin⁰⁸ Programming Editor has a patent pending feature that saves the programmer from having to size a bitmap in another photo editing software, and then bring it onto the screen. You can size an object whichever way you want it within the uWin⁰⁸ Programming Editor itself. It saves you the headache of going back and forth between two software programs.



uWin⁰⁸ Programming Editor

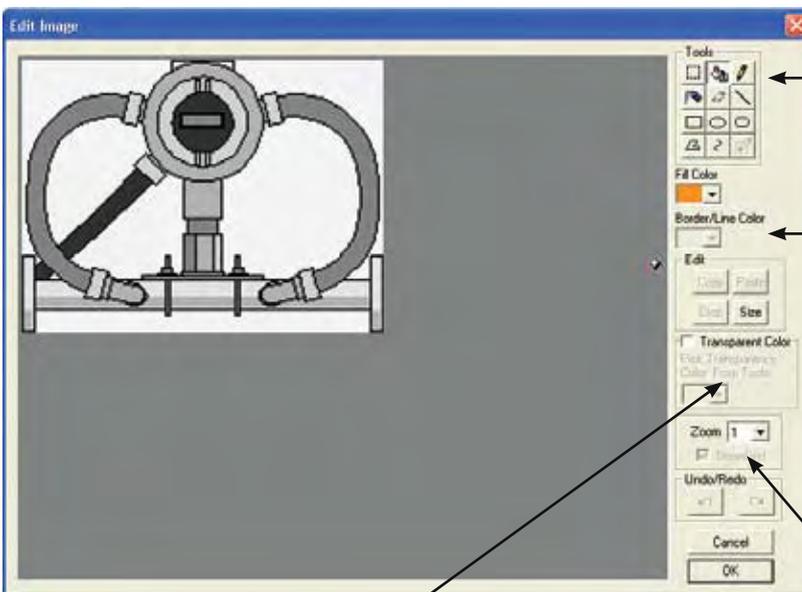
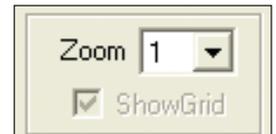
Now with Built-in Photo Editor at no extra cost!!



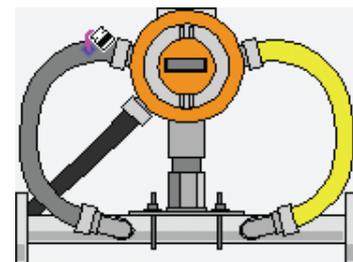
The uWin⁰⁸ programming editor has raised the bar further in HMI software by including an exclusive, advanced, patent pending, bitmap photo editor that allows any bitmap being imported (such as from the 4000 symbols library) to be edited almost like “Photoshop” within the uWin⁰⁸ Software itself.

It eliminates the need to :

1. Have “Photoshop” or “MSPaint” program installed on your computer
2. Bring the bitmap into “Photoshop”, edit it and then import it back to the HMI program

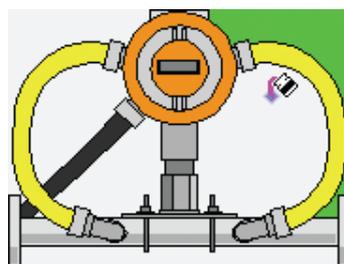


Built-In Shapes, Drawing Pencils, Spray Cans, Eraser and more ...



Fill Color

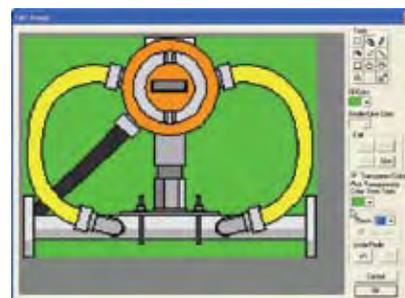
Fill the color on the bitmap of your own choice from the color palette.



Transparent color

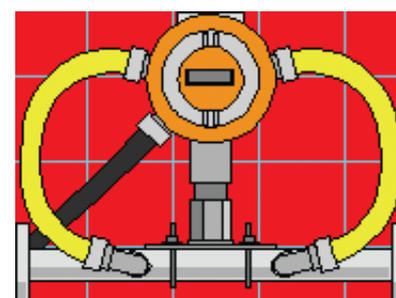
The transparent color is used to make all areas of that color which is as same as the fill color to be invisible or transparent.

In the above example the green fill and transparent color makes it invisible or transparent.



Zoom Tool

Zoom tool has 1 to 4 level, making edits in tight spots is no longer a problem. For pixel-per-pixel level detail there is a zoom level 4



Final bitmap Image

With the above built-in photo editing feature in uWin⁰⁸ software eliminates a need of photoshop on your PC

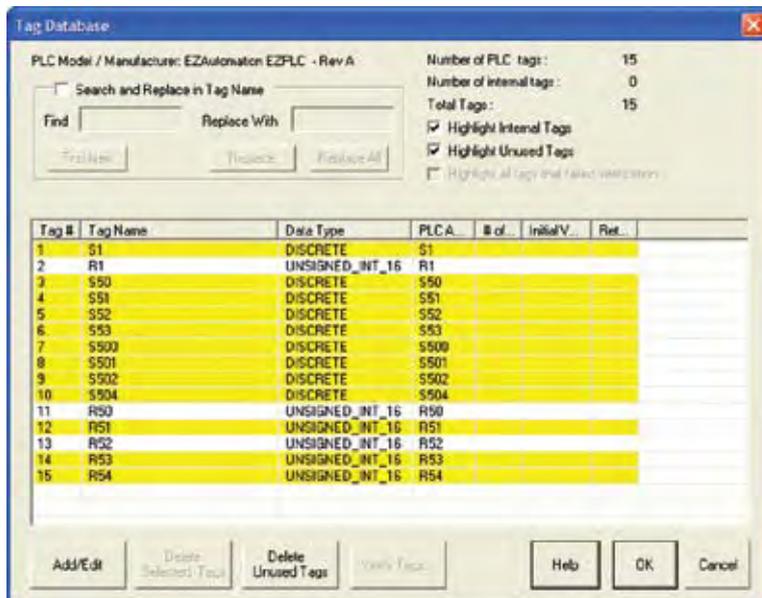
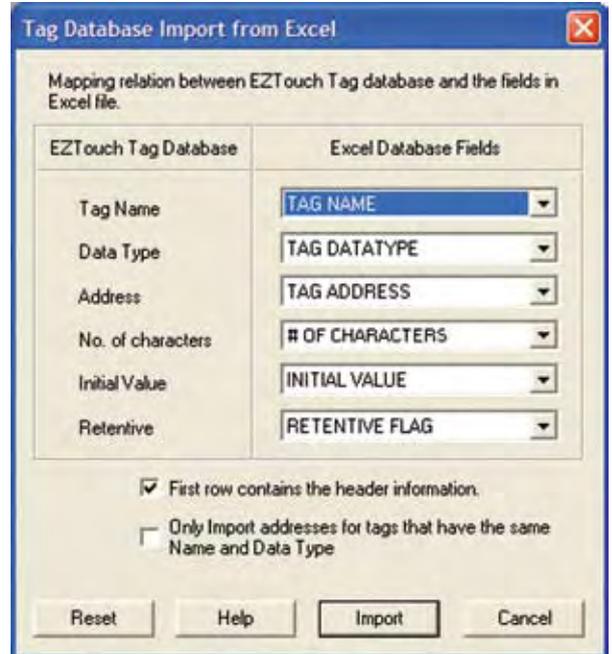
uWin⁰⁸ Programming Editor Database Management

Import / Export of Tag Database

uWin⁰⁸ programming software allows both import and export of tag database from and to an Excel sheet. This saves a tremendous amount of time when developing PLC software using the same tag names.

High-light Unused Tags

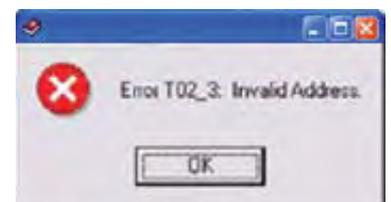
The Tags in the uWin⁰⁸ Software can easily be sorted by name, by type and by PLC address. On top of that you can high-light unused tags in yellow to make it simple for the programmer to manage his/her project.



The enhanced ability of Importing/Exporting the tag database, Highlighting the unused tags, and Instant Syntax checking makes it extremely convenient for the programmer to manage his/her project.

Instant Syntax Checking

The uWin⁰⁸ software is unique in that, it checks the address syntax of all the PLCs and PLC Networks supported, before the address is allowed to be entered. This feature saves a tremendous amount of time in implementing an HMI PLC Project. You find your errors at the time of making the error not when you are finished and saving or downloading the project.



Tough Panel™

Unique Features

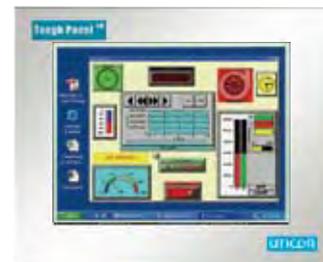
Your Choice of Operating System

The standard Uticor Toughpanel has a dedicated processor, as opposed to running on a computer platform. This offers a much faster response time for touch inputs, typically 0.75 seconds instead of slightly more than a second in a Windows CE environment. A Windows® device is inherently slower in response time because it has a lot of overhead to cover during start-up and operation. A dedicated processor uses less memory, does not require a boot -up, requires only 2MB to trend data, and is not subject to hardware tampering. Nor can it be infected with a virus from the Internet.

A Windows CE system has the advantage, however, of running user selected software in applications such as Word, Excel, Adobe Acrobat, PDF, and MPEG (Video). Many users desire to run a program to show machine operation or key maintenance issues. Others want to imbed the Operating or Maintenance Manual as a PDF file. There are as many unique applications as memory available to run them.



INSTANTANEOUS TOUCH RESPONSE



**Windows CE Touchpanel
playing maintenance video!**

Which should I choose?

Complex automation systems with a built-in redundant design or non critical machinery or process applications may have tolerance for the shortcomings of a Windows based operating system. Smaller or simpler applications or those that require robust/critical operation or a fast operating speed may be best served by a dedicated processor. We offer both platforms.

The programming software is the same for both.

You choose which is right for your application (uses same software)

1: Dedicated Processor Touch Panel

- Motorola Coldfire 32-bit CPU operating at 40MHz
- Fastest response time for touch inputs (typically 0.75 seconds)
- Fast and simple flash-based operating system, easily field upgradeable
- 512KB and 1MB battery back RAM
- 512KB, 1MB, and 2MB Flash Memory
- Will accommodate innovative NetView and Control card for Internet connectivity

2: The Window CE Touch Panel

- Same protocols supported as standard touch panel
- Same programming software
- Same screen sizes are available from 5.7" and up.
- AMD Alchemy 333 MHz 32 Bit Processor
- 32 MB Flash and 64 MB RAM built in
- Compact Flash slot
- 10/100 base-T Ethernet Port
- USB Host Port
- Network card for future expansion



**Dedicated Processor
Higher Speed, Less Memory**

**Seamless Migration
between the two
Operating Systems**



**Windows CE Processor
Windows Functions, More Memory**



Unique Features

Troubleshoot your Panel/Project Half way across the World without leaving your Desk!!

Toughpanels have an exclusive unique feature that allows you to view and control any screen on your touchpanel over the internet. Toughpanels with dedicated processor need an NVC option card whereas Toughpanels with Windows processor has this function built-in. This optional card has its own processor that allows remote monitoring and control. View and control operator screens over the internet from your PC as if you were right on the touch panel on the factory floor. **This is also a great tool for management/quality personnel in any plant to monitor production over intranet.**



NetView & Control (NVC) option card



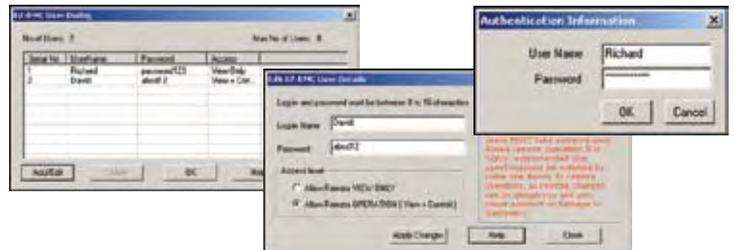
NVC option card plugs into the extension connector of the Toughpanels. It has an Ethernet Port that allows a PC, anywhere in the world, to view any screen in the Panel in real-time as well as control the operation of the Panel using your mouse, also in real-time. This card can also be configured to send emails from the Panel. As a side benefit NVC card also gives you the ability to store up to 2GB of Data in an SD card onboard. Each NVC card has a static I/P address assigned to it which issued to address the card/panel over the internet/intranet.

Built-in NetView & Control (NVC) in CE Toughpanel

Toughpanels with Windows CE Processor has a built-in Ethernet port that allows it to perform NetView and Control function without the need for the additional NVC optional card. It should however be noted that the response time of the CE Toughpanel would be slightly slower than the Toughpanel with dedicated processor and NVC option card because the latter has a separate processor to perform the NVC function.

High Level of Password Security

For Obvious reasons RMC feature has multiple levels of password protection.

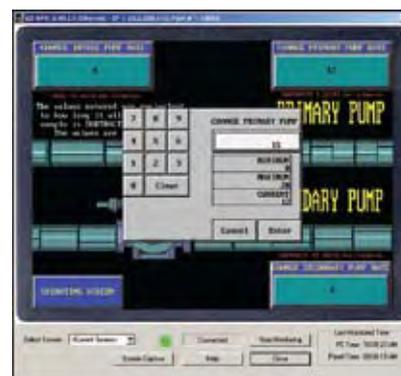


Monitor Machine/Process operation through the Panel



With UT-NVC software installed in your PC you could monitor any screen on the Touchpanel addressed by the software in Real-Time allowing system troubleshooting and/or management review of the machine operation.

Control Machine/Process operation through the Panel



Under multiple password security UT-NVC software allows you to operate the Touchpanel just as if you are standing right next to it. Clicking on a mouse or entering a preset thru your PC in Chicago will perform the same actions as if an operator was doing the same on the touchscreen half way across the world.



Unique Features

On-Line Edit

For more than a decade on-line programming with PLC's has been a necessity in the programming, startup, and maintenance of PLC applications. **The concept of writing a program completely, downloading it, and redoing this process as modifications are discovered is unacceptable. Why should it be acceptable with the touch panel programming?** It is important that changes can be made on-line in that different colors or animations can only be fine-tuned while the application is running. It is much easier to troubleshoot system logic by adding objects while the application is still running. All our touchpanels offer complete on-line programming, as they had from the earliest units.

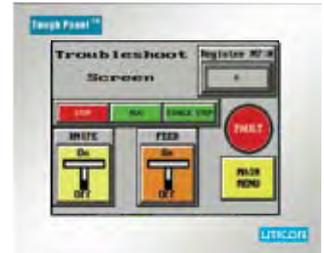


On-Line Edit allows changes in screen design without shutting down the machine. You can also add new objects or simply create a new screen just for troubleshooting logic

You know the power of On-Line programming if you deal with machine/process start-up



1 Connect Computer to Panel



2 Create a temporary Troubleshoot Screen in "Edit On-Line" Mode

3 Troubleshoot without ever having to shut down the machine

On-Screen Recipe Edit

With the On Screen Recipe Edit instruction, you fine tune your recipes on-line while the operation is running, without a PC. Consider the time savings and simplicity:

Previous Method -

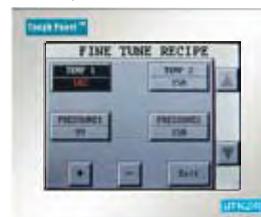
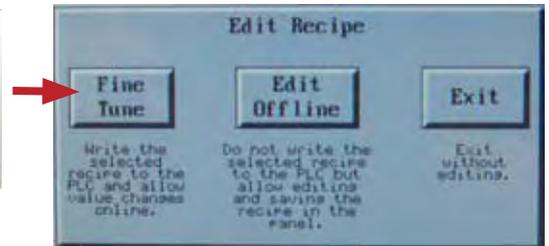
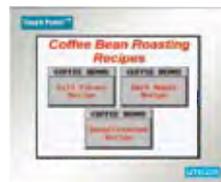
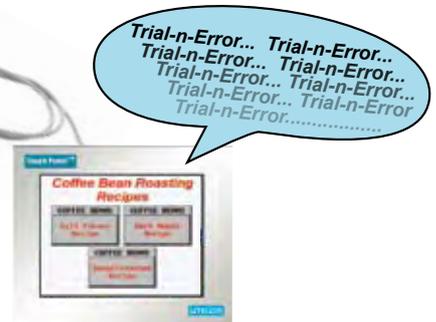
1. Interrupt and shut down the machine or process
2. Modify the recipe in the PC
3. Download the new program from the PC to the touch panel
4. Restart the machine or process
5. Repeat until the desired results are achieved

Method with the On Screen Recipe Edit instruction -

1. Bring up the OnScreen Recipe Edit Object on the touch panel
2. Increment / Decrement until you get the perfect results

The instruction also includes up and down (Increment/Decrement) buttons. The operator intuitively fine-tunes the recipe during operation anytime.

After fine-tuning you can the recipe inside panel's memory.



Unique Features, Universal Connectivity

Universal Ethernet Drivers



RJ45 Connector in place of 15-pin D-Sub for Universal Ethernet models in standard Toughpanels with dedicated processor.



Ethernet RJ45 Connector

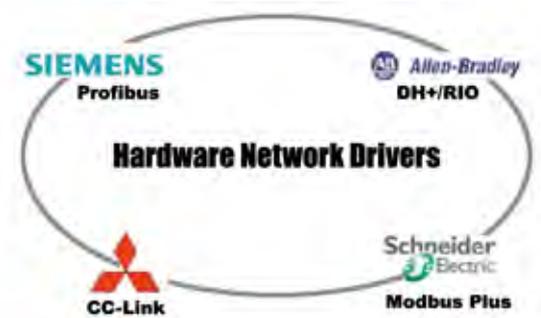
Motherboard for Toughpanel with CE processor

Software Selectable Ethernet Protocol

- Allen-Bradley Control-Logix with Native Tags
- Allen-Bradley SLC or MicroLogix DF1 over Ethernet
- Modbus TCP/IP GE SRTP
- Profinet (coming soon)

High Speed Dedicated Network Drivers

- DH+/Remote I/O (Rockwell) CC-Link (Mitsubishi)
- Modbus Plus (Schneider) Profibus
- DeviceNet



Uticor Toughpanels connect to more than 90% of PLCs and Networks

Serial Drivers

- Allen-Bradley DF1 Half and Full Duplex (PLC-5, SLC 500, MicroLogix 1000, 1200 and 1500)
- DH485/AIC/AIC+ for MicroLogix 1000, 1200, 1500, SLC500, 5/01, /02, /03
- Aromat Mewtocol COM
- Baldor
- Control Techniques - Unidrive 2-wire, 4-wire (binary)
- Control Technology Corp. (CTC) - CTC2600, 2700 and 5100 (CTC Binary)
- GE Fanuc SNPX (90/30, 90/70)
- Idec Computer Link
- All Mitsubishi FX Series
- Modicon MODBUS RTU
- Omron Host Link (C200 and C500)
- Parker Hannifan
- Siemens S7 MPI Adapter series PLCs
- Siemens S7-200
- Square D Symax - 300 Series CPU, 400 Series CPU (Symax)
- Texas Instruments - TI5x5 Series, TI505, TI545-1102, TI545-1104 (Transparent Byte Protocol or Non-Intelligent Terminal Protocol)
- Uni-Telway - Telemecanique TSX 37 Micro (UNI-TE Version 1.1)
- Yaskawa (Memobus protocol)



Simultaneous Communication

Dual Drivers

Toughpanels have the ability to communicate to two PLCs simultaneously. For example you can connect to profibus on network side and DH485 or DF1 on the PLC side. Only one network card is allowed in a Toughpanel.

Tough Panel™

More Features

Built like a ^{Smart} Tank



Alarms and Password Protection

Toughpanels offer comprehensive alarming tools, allowing you to trigger alarms based on events (Bits) and values (registers), with the values being monitored for a variety of conditions (in/out of range). The alarm history also stores details and counts and all this information can be printed or logged. Also Toughpanels offer the flexibility of not only password protecting your alarms but also every object.



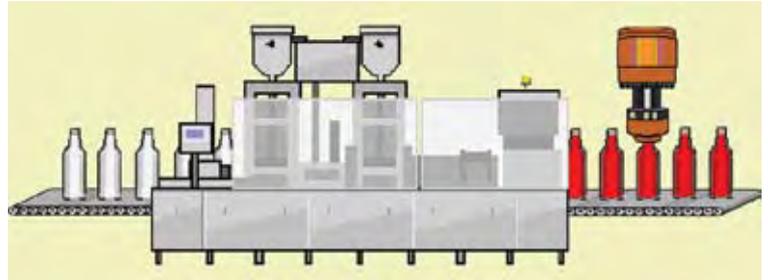
Eight levels of password security for every input object.

Real-Time Animation Objects

Great for the machine operators to view and understand the tool motion, machine status or the whole process in real time.

Single Position

Single position animation allows you to display a sequence of images at a fixed location on the screen. The images in the animation can be updated either periodically, using a numeric tag, or when a discrete tag changes state.



Multi Position

Multi position animation allows you to display a sequence of images at different locations on the screen. The images in the animation can be updated either periodically, using a numeric tag, or when a discrete tag changes state.

Multi-function Button

The multi-state indicators allow you to visualize process conditions, such as three states of a traffic light. Toughpanel also offers bitmap-based multi-state indicators, where you can use up to 256 bitmaps to indicate 256 different conditions. The bitmaps allow you to design very intuitive screens.





Unique Features

Fastest Response to Touch Input

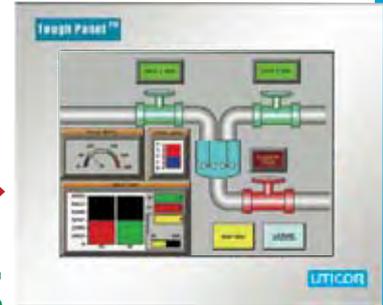
Because of the use of vector based graphics and a dedicated processor, Toughpanels are universally recognized as having the fastest response to touch inputs, typically less than 3/4 of a second even with complex screens. This means no waiting and also less wear on a panel from operators pounding an object on a screen waiting for a response.



Switch between screens in less than a second!



TYPICAL 0.75 SEC and not 2-3 sec. like others



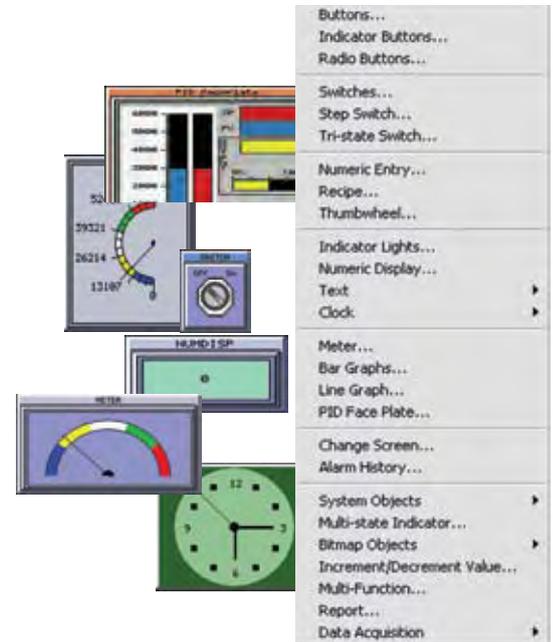
Dazzling Graphics & 256 Colors

Though extremely easy to configure, these touch panels are much more than push-button & pilot-light replacements. These panels provide high-end panel components & compelling real-life graphics that you would normally expect only on an expensive PC-based software HMI. Additionally, with 128 colors, blinking abilities, and extensive bitmap support, the unit offers dazzling graphics that would please any discerning user.

Pre-Built Panel Components (copyrighted)

In addition to pushbuttons, indicator lights, numeric entry and displays, the PowerPanel offers panel components such as Analog Meters, PID Faceplates, Bar Graphs, Trend Graphs, Alarms, Recipes, Radio Buttons, Thumbwheels, a variety of Switches, and a rich library of Bitmaps.

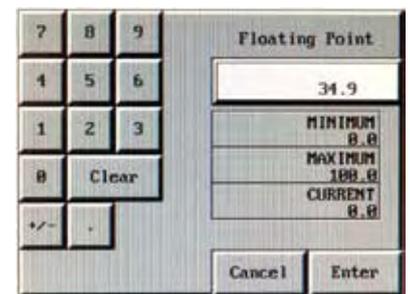
Also, the user can select from a palette of 128 rich colors for all these components. Each color can be selected to blink in order to create components that will grab the operator's attention.



Wide Range of Data Entry Tools

The Toughpanel also comes with a wide range of data entry tool allow an operator to easily enter both text or numeric data.

- A pop-up ascii keyboard, allows operators to enter part numbers and/or leave messages on the panel for another operator.
- A pop-up numeric keypad allows operators to set passwords, reset set-points and other data variables.
- Don't like numeric keypads, no problem, we also support pop-up thumbwheel switches, just like those old mechanical one's.



POP-UP Keypad allows you to enter data into a pre-defined PLC register.

POP-UP Electronic Thumbwheel emulates a mechanical thumbwheel switch.





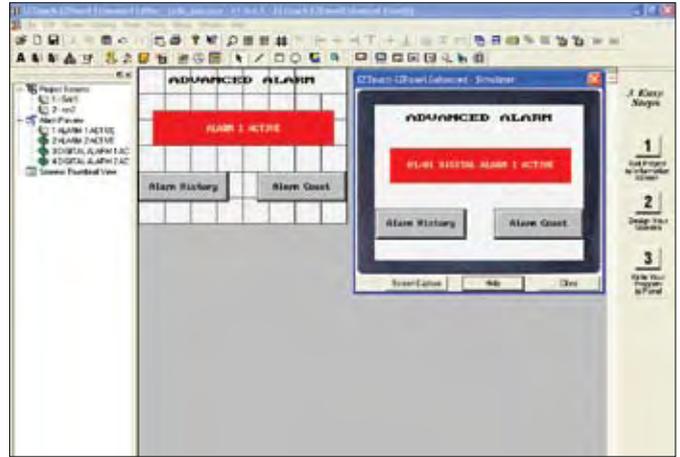
Unique Features

Advanced Alarm Management

Alarm data can be set up in alarm reports. If an alarm occurs, an active alarm appears at the bottom of the screen and the alarm report can be selected to appear on the screen when the Alarm History button is pressed. The operator or maintenance department can view the alarm history, alarm count, and specific details of the alarm. The Alarm detail shows the cause of the Alarm, tag value, hi-low limits and when it was cleared.

Alarms tables do not need to take up operating screen real estate if alarms are not active.

The alarms can be triggered from any PLC tag value, either discrete On/Off or set points of variable data. The alarm database can be imported from Excel and exported to Excel. Multiple alarm banners can be displayed on the same page.



Project Update Utility

This simple utility allows OEM's (machine builders, conveyor manufacturers, etc.) and system integrators to make changes to the touch panel program and make these modifications available to the end user without the requirement for the end user to possess the programming software, or to be at all familiar with it.

The OEM sends the new program by email (as a zip file with simple and automatic unpacking) or makes it available on their website for downloading. The end user needs only web access and a laptop computer.



This utility can also be used to send new programs from a central engineering department to various plants.

While we also offer the capability to modify the user programs by sending a new flash memory card, many programmers find this utility a quicker and more direct method requiring less chance for errors by the end-user personnel.

Visibility Tags - Maximum Use of Screen

All objects have the unique ability to appear and disappear based upon discrete and variable PLC tag data. This allows objects to be hidden for maximum utilization of screen real estate.



UTDaq Data Acquisition Software

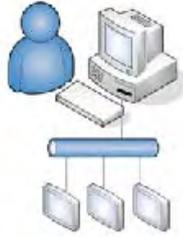
Log Data For Any PLC Tag

Available on RS232 Serial Port as well as Ethernet

It's as Simple as **1-2-3**
collect, save and store PLC tag data

What is UTDaq?

UTDaq is a data acquisition utility, designed to collect and save tag data from one or more (connected and running) Toughpanels.

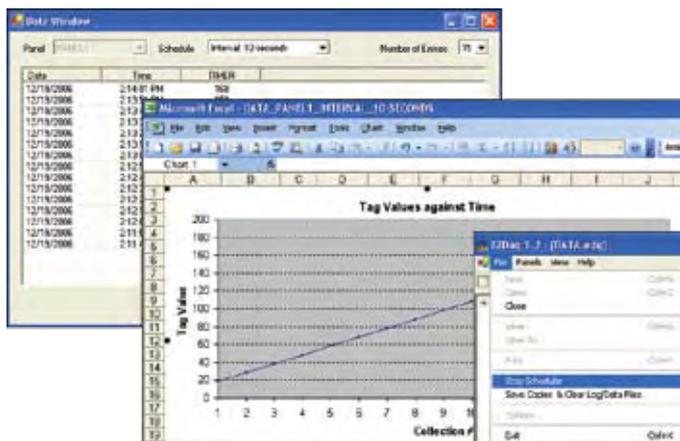


What kind of communication medium is required?

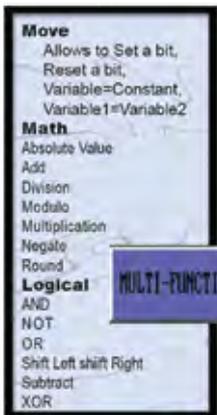
UTDaq works on both Ethernet as well as Serial communication medium.

How to view data?

Data files are organized in a convenient user selectable format (tab delimited or CSV) and can viewed in excel or any text editor.



Math-logic/Multi-function Buttons, Scripting



Toughpanels offer a sophisticated control, called the Multi-function Object. As the name implies, this Object allows you to perform multiple functions, including Mathematical and Logical operations on PLC data. For example, you can set/reset multiple bits & transfer constants or variables or expressions to tags. Remarkably, this Benefit allows a user to perform up to 20 operations with one Object. Toughpanel also allows you to perform these Multiple functions under the PLC control a very useful feature to offload mathematical & logical

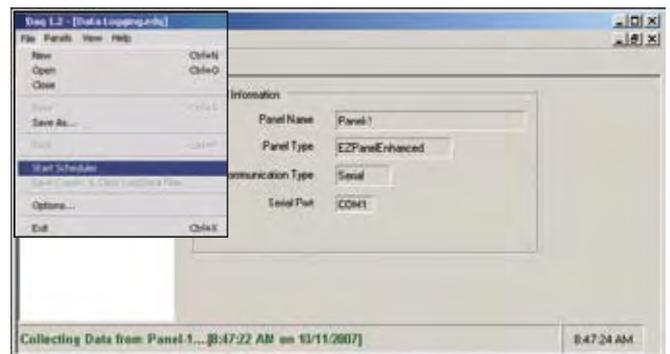
computations from the ladder logic to the panel.

How does it work?

- 1 Run the UTDaq application on a PC to create a Data Acquisition Schedule file.
- 2 Specify the tags and a schedule for each tag for data acquisition.
- 3 The Schedule can be set either on the basis of time or an event.



- 4 While creating the Data Acquisition Schedule file, Panel (from which data has to be collected) must be connected to the PC.
- 5 Once the Schedule file is created, the application can start collecting and storing acquired data.



- 6 For the CE Toughpanels, you have an option to collect the data on the panel itself but to create the Schedule file, you still need a PC.



Tough Panel™

Unique Features

Built like a ^{Smart} Tank



Drop-in, Plug-n-Play Replacement for those Obsolete and feature-limited Touchpanels

Toughpanels offer Drop-in replacement for Allen Bradley Panelview and Panelview Plus, General Electric's Quickpanels and equivalent GP series touchpanels from Proface. Program conversion is cost minimal. Panel cut-out and external dimensions are identical. Input/Output wiring is the same. All Toughpanels have flat panel LCD display. *In addition Toughpanels have many more advanced features such as PC like graphics, flash modules for program storage, recipe and advanced alarm capability, Remote NetView and Control, Data Acquisition and storage, Unicode implementation, Super fast response to touch input, Project upgrade utility, Multi-state indicators, 4000 symbol library, bitmap buttons, dual drivers, scripting, SPC, visibility control of objects, your choice of operating system, database management, syntax checking, On-Line Edit, On-Screen Recipe Edit and many many more....*



**Quickpanels from TCP/GE
GP Series from Proface**



**Panelviews, Panelview Plus
from Allen Bradley**

Implementation Cost

You will be pleasantly surprised to find out that Toughpanels with all this additional features not only cost less, the cost of project conversion is minimal. Whereas typical outside services charge thousands of dollars for redevelopment of project screens Uticor can do the same at fraction of the cost.

Competitor's Panel	Toughpanel
AB PanelView - 5", PV550	Toughpanel, 6" TFT Color
GE Quickpanel - 6", QP Jr. Monochrome	Toughpanel, 6" TFT Color
GE Quickpanel - 6", QP Jr. STN or TFTColor	Toughpanel, 6" TFT Color
AB PanelView - 6", PV600 Monochrome	Toughpanel, 6" TFT Color
AB PanelView - 6", PV600 STN Color	Toughpanel, 6" TFT Color
AB PanelView Plus - 7", PVPlus700 TFT Color	Toughpanel, 6" TFT Color
GE Quickpanel - 9"	Toughpanel, 8" TFT Color
AB PanelView - 9", PV900 Monochrome	Toughpanel, 10.4" TFT Color
GE Quickpanel - 10" Mono, STN or TFT Color	Toughpanel, 10.4" TFT Color
AB- PanelView Plus - 10", PVPlus1000 TFT Color	Toughpanel, 10.4" TFT Color
AB PanelView - 10", PV1000, PV1000E TFT Color	Toughpanel, 10.4" TFT Color
AB PanelView E - 12", PV1200, PV1200E CRT Monochrome	Toughpanel, 10.4" TFT Color
AB PanelView E - 14", PV1400E CRT Monochrome	Toughpanel, 15" TFT Color
AB PanelView Plus - 15", PVPlus1500 TFT Color	Toughpanel, 15" TFT Color

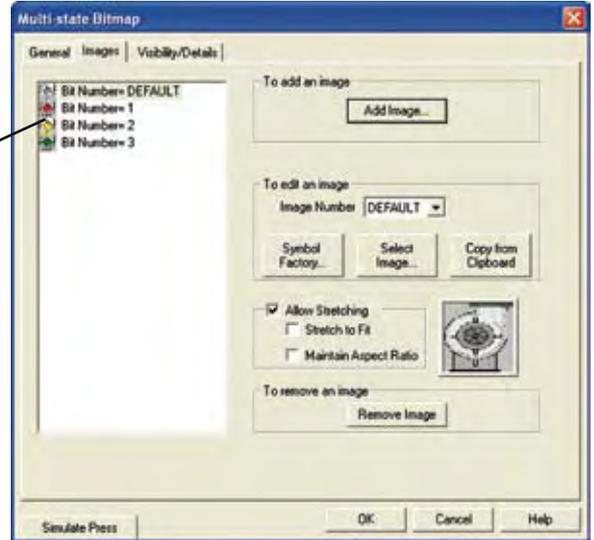
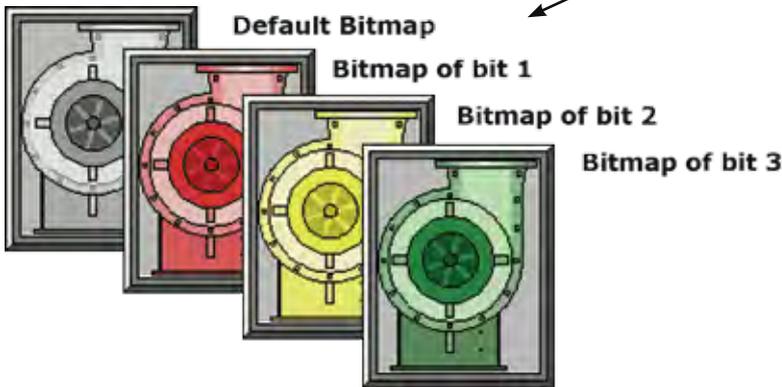
Tough Panel™

More Features, Simply

Advanced Bitmap Objects

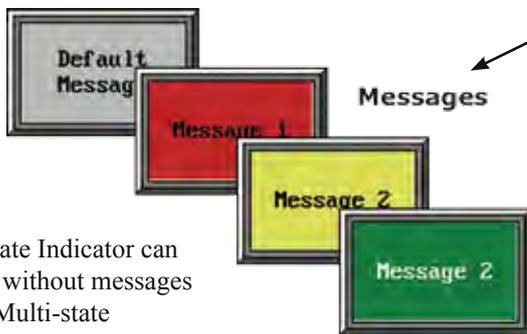
Multi-state Bitmap Object

This object displays images within a given frame on the ToughPanel. The object displays one image at a time based upon the bit that is on or the value of a tag. The maximum number of images is limited only by memory size. Our bitmaps use significantly lower memory because of our vector graphics.

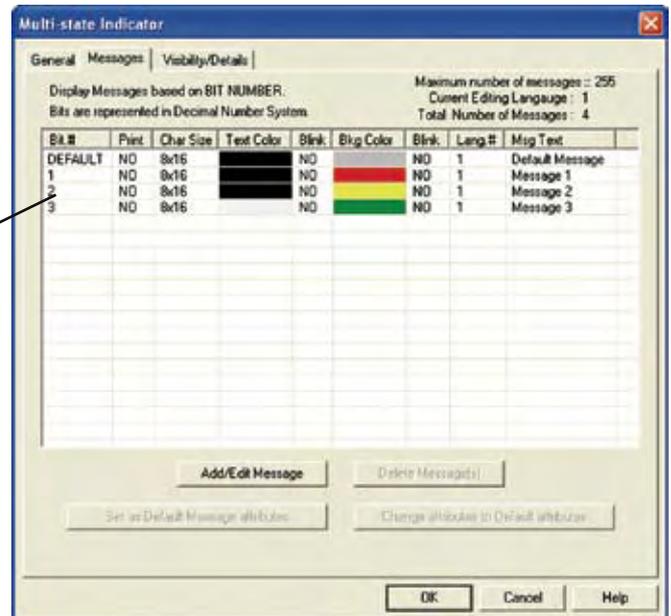
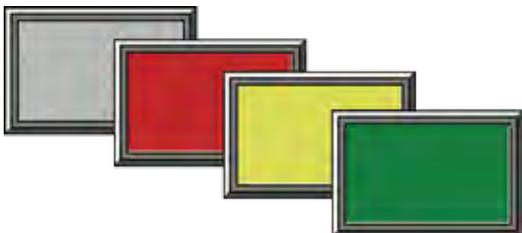


Multi-state Indicator Object

The Multi-state Indicator Object has been created to display pre-programmed messages within a frame on the ToughPanel. Each object has its own message storage and does not need an external database. 256 messages can be displayed based upon the value of a bit or of a tag.



The Multi-state Indicator can also be used without messages as simply a Multi-state Indicator Light, such as the ones shown here.



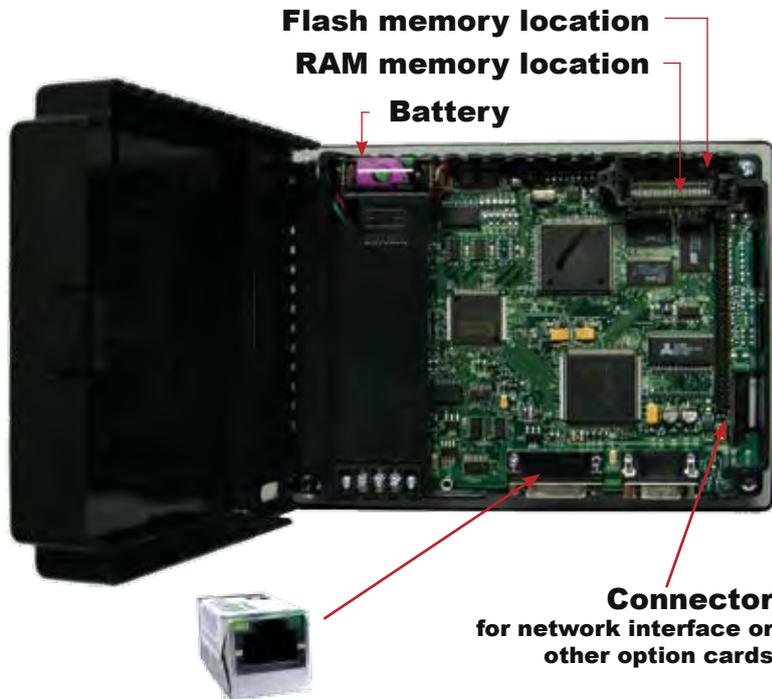


Communication Ports, Memory...

Toughpanel with Dedicated Processor

Flash Card & Flash Firmware

Flash card module can be used to back up the user program and provide program portability. Flash firmware allows you to quickly upgrade the firmware in the field. 512K, 1M or 2M flash modules are available.



Flash memory location
RAM memory location
Battery

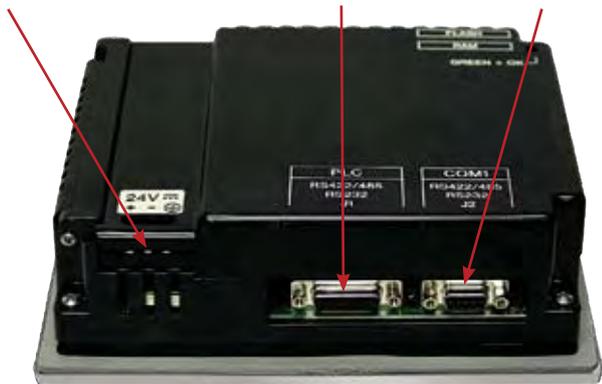
Connector for network interface or other option cards

RJ45 Connector in place of 15-pin D-Sub for Universal Ethernet models

Memory Types

Store user program in the battery backed RAM memory or a Flash memory program is required to maintain the program if battery power is lost.

Power Connector PLC Port COM1 Port



RAM memory card installed



RS232 and RS 422/485 Ports

Com1 is RS232 which can be used for both PLC communication or programming the panel from a PC. RS 422/485 is an auxiliary port that can be used for PLC communication or connection to another device like a barcode printer

Additional RAM

512K or 1MB RAM modules are available for memory expansion sometimes recommended for bitmap extensive larger screens.

Built like a ^{Smart} Tank

