

Xpanel

Revolutionary HMI Experience



CIMON Xpanel

WINDOWS CE BASED NEW TOUCH



Durable Reinforced Plastic Applied

The improved heat resistant and shock resistant properties of the case safely protects the electrical components of the product.

High Quality LED Display

Low-power, low-heat and full-brightness make it the most powerful and vivid high-definition HMI in the market.

Variety of Interfaces

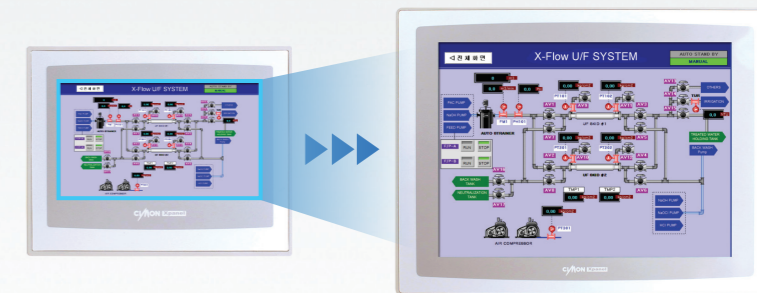
Ethernet, Serial (RS232/485), USB Host/Tool, SD card slot included.
(except for some models)

Convenient and Powerful Designing Tool

powerful features, such as infinite tag database, various communication drivers, more than 20,000 graphic library objects, and user-friendly interface make it very suitable for industrial applications.

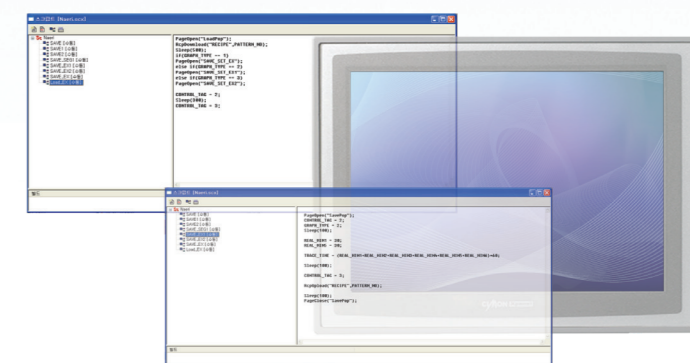
Auto Page Resize

Same projects can be used on all XPANEL with different resolution and size.



Easy-to-use Script Editor

Excellent applicability with a C language based macro editor.



Project Protection Function

Non-authorized personnel cannot extract the project from an XPANEL.



Real-time Data Logging

The reports can be saved as CSV files onto the internal memory, SD card, or USB memory card, and it can be viewed in Microsoft EXCEL.



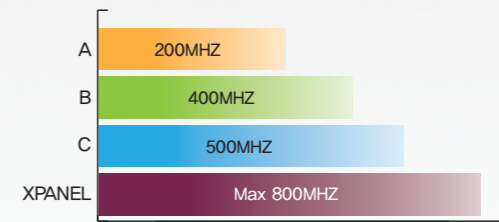


Multi-Language Supported

Supports every language from around the world to be able to easily integrate the project anywhere in the world.

Ultrafast CPU Processor

Equipped with high-speed industrial CPU which has low-power consumption and low-temperature operation for complex operations and fancy graphic processing.

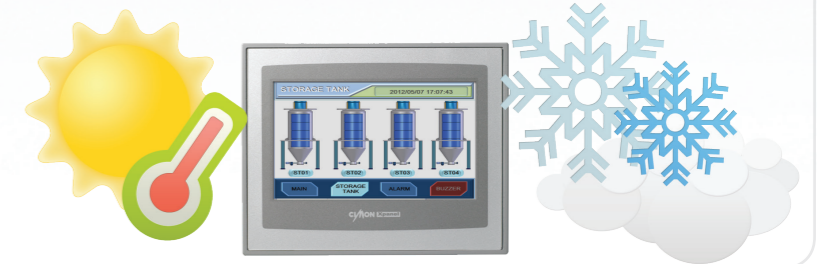


Powerful and Versatile Communication

Supports Serial communication (RS232, RS485/422) and Ethernet communication as standard, and Provides more than 200 communication drivers of major equipment used all around the world for an easy and flexible network solution.

Operating Temperature of 0°C~60°C

Reliable operation even in extreme conditions of industrial environment.



Unbreakable Security Control

Protects the system safely from unauthorized access with 10 security levels.



Intelligent Self-Diagnosis Function

Easy monitoring of the current status of XPANEL with system status logging capabilities and communication frame monitoring function.



Variety of Graphic Object Library

Provides more than 20000 kinds of graphic objects for visually pleasing projects.

Painless Project Download/Upload



SD Card

USB

USB Cable

Ethernet

Easy Connection with Peripherals



USB Scanner

USB Keyboard

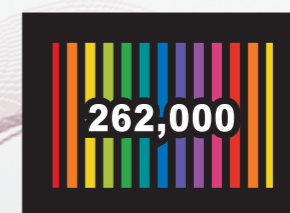
USB Printer

Resistive touchscreen panel for durability and accuracy



State-of-the-art High-Definition Display

Supports 262,000 FULL COLOR SVGA for delicate graphic tasks and the full-brightness and high-definition LED display that brings the pictures to life.



Experience Ultimate Performance Beyond the Norm

- High-speed CPU embedded
- Large memory size and user storage
 - XT04/07 128MB, XT10/12 256MB DDR2 SDRAM
 - 128MB SLC NAND Flash
 - Multiple page components and objects
- High-quality color expression up to 16.7M colors
- High-resolution display up to Max 1024 x 768

Easy Operating Environment

- Based on Windows CE / Windows Embedded Compact 7
- Manages the project data by Activesync or Mobile Device Center



Convenient Project Download

- Project files downloadable through XpanelDesigner
- Easy project downloading through USB cable / Ethernet cable / SD memory card / USB memory



Flexible

- Supports SD memory card
- Provides various communication drivers and if requested, wanted drivers can be developed for free
- Enables to connect to various external devices through USB
- Easy to manage by built-in maintenance functions

Comfortable Network Environment

- Supports various communication interface
 - Built-in 10/100M Ethernet port (except XT04CD-DN, XT07CD-AN/DN)
 - Two built-in serial ports
- Excellent Scalability
 - Built-in USB(Host) port which enables to connect to USB devices such as keyboard, mouse, USB storage, etc.
 - Built-in SDHC card slot (except XT04CD, XT07CD-AN/DN)
- Integrated Networking Solutions
 - Operates up to 3 communication ports concurrently (2 serial, 1 ethernet)
 - All models support multi-drop networking : RS485 port, 10/100M Ethernet port
 - Easy communication with other CIMON-Xpanels or CIMON-SCADA
 - Convenient communication with other monitoring devices or software by MODBUS RTU/TCP slave
 - Various drivers supported

» General Specification

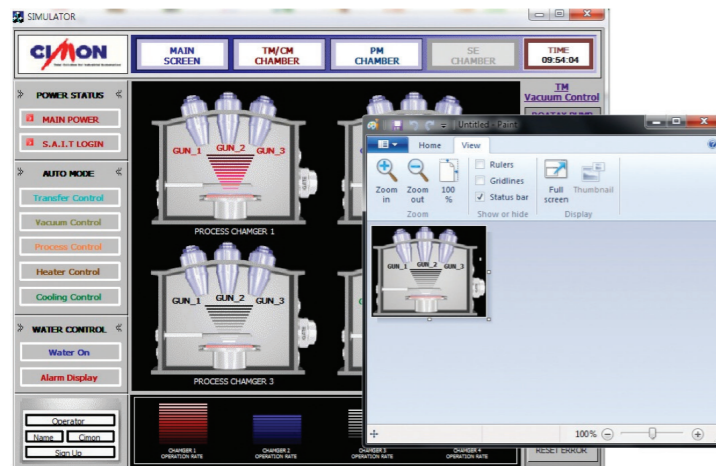
Item	Description
Permitted Voltage	DC24V or AC100-240V
Ambient Temperature	0°C ~ 60°C
Storage Temperature	-10°C ~ 60°C
Ambient Humidity	10%RH ~ 90%RH(Non-condensing, wet bulb temperature: 39°C max.)
Storage Humidity	10%RH ~ 90%RH (Non-condensing, wet bulb temperature: 39°C max)
Air Pressure Vibration Resistance (Availment altitude)	800hPa ~ 1114hPa(Up to 2000m/6,500ft)
Dust	0.1mg/m ³ or less
Pollution Degree	Less than equal to Pollution degree 2
Corrosive gases	Free from corrosive gases
Vibration Resistance	IEC61131-2 Compliant Occasional Vibration 10Hz to 75Hz 0.075mm, 57Hz to 150Hz 9.8m/s ² Continuous Vibration 10Hz to 57Hz 0.035mm, 57Hz to 150Hz 4.9m/s ² X,Y,Z directions for 10 cycle (80min.)
Noise resistance	± 2kV, 1uS
Electrostatic Discharge Immunity	Contact Discharge 4kV (IEC61000-4-2) Air Discharge 8kV

CIMON-XPANEL

User-Friendly Workspace

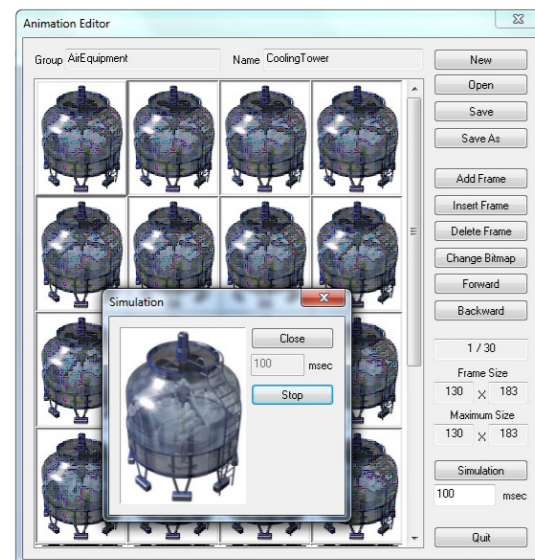
- Designing tool for Xpanel is called Xpanel Designer
- Development environment is similar to CIMON-SCADA.
- Various ways to download / update the project (USB, Ethernet Loader, Removable Disk)

- Easy to insert images using the Clipboard



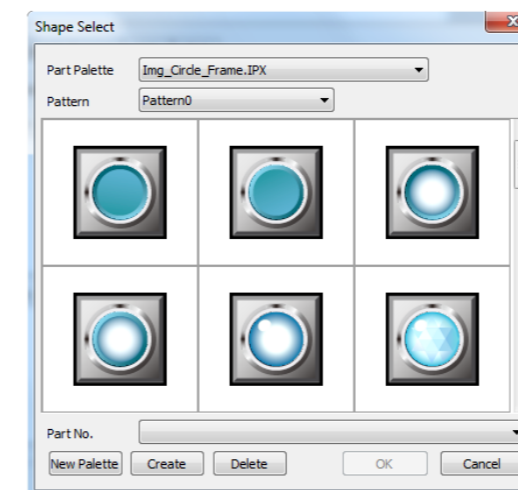
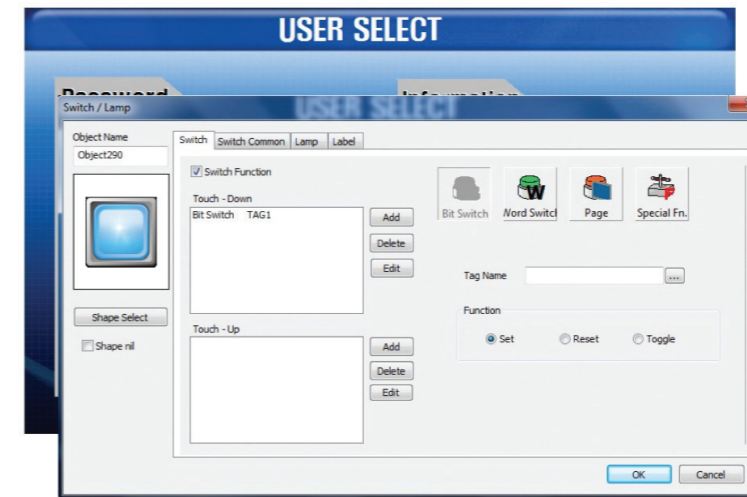
- External graphic images can be imported/exported by using windows clipboard.
- Supports transparent color function
- Supports image compression
- Supports 24bit bitmap image

- Animation Editor



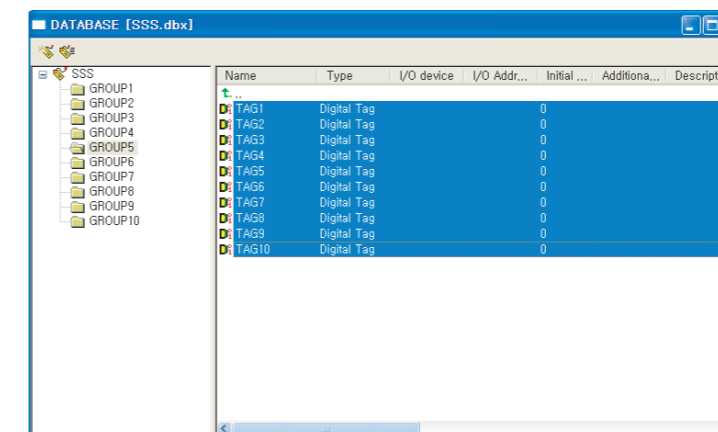
- User can create his own animation object
- Provides the simulator for animation object
- Newly made animation can be added to the library
- Supports 24bit bitmap image

- Convenient Switch/Lamp Object



- Simple mouse operations provide the switch and lamp functions
- Up/down action is divided in the switch function
- Up to 256 steps can be defined in the lamp function
- Provides 8000 part palette

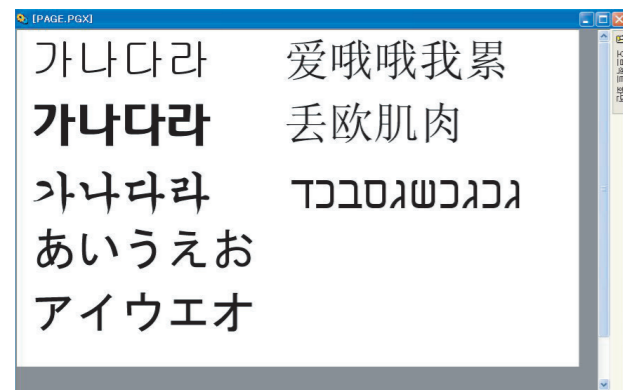
- Simple and Easy Database Manager



- All the address data can be identified and modified in the database
- Database compatible with Excel
- Easy to exchange the project to other devices

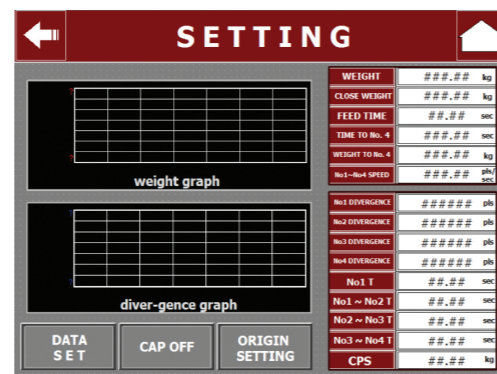
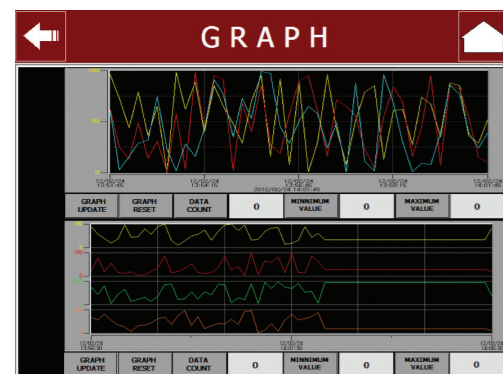
CIMON-XPANEL

- Supports multi-language and various fonts
 - Enables the use of installed fonts from Windows
 - Supports unicode

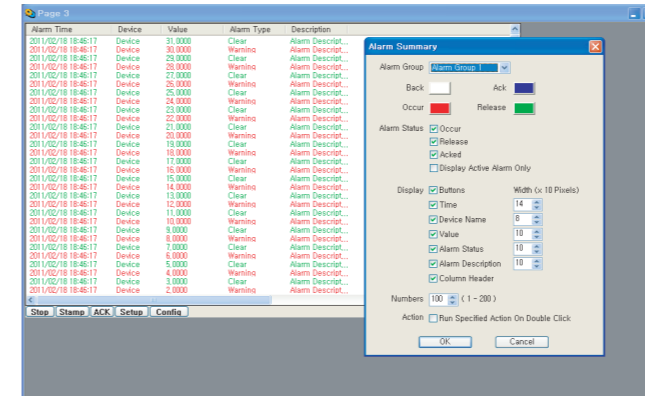
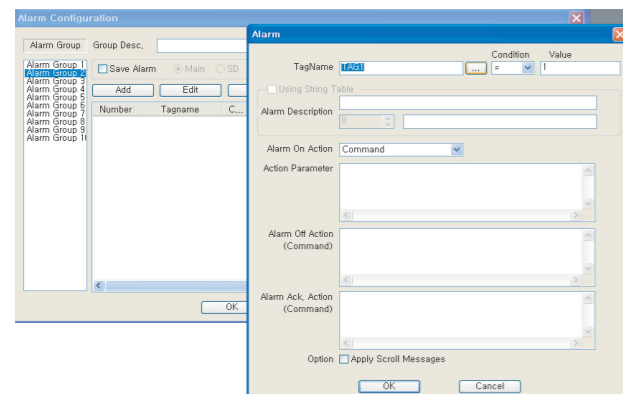


Supports a Variety of Special Function

- Provides various forms of trend
 - YT, XY, Log, ST, SPC, Scope
 - Enables to set a sampling period up to 100 ms
 - Provides historical trend (YT, XY)
 - Supports zoom feature (YT, XY)
 - Save as a CSV file (YT, Log)
 - Enables to display a data log (Scope)
 - Supports special purpose trend (ST, SPC)



Alarm

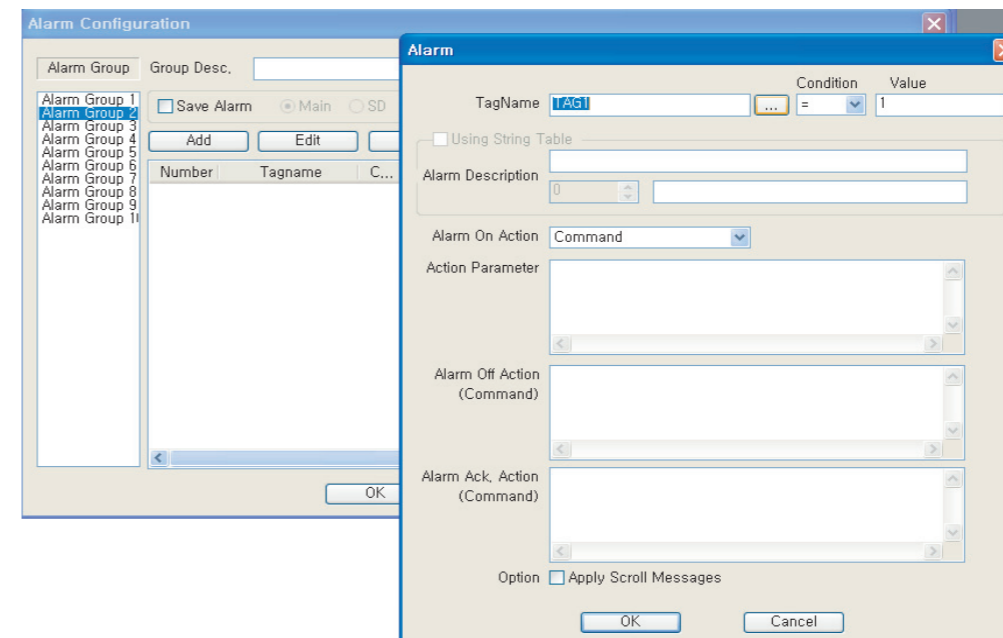


- Supports 10 alarm groups
- Each alarm group stores up to 200 alarms
- Depending on the set, the alarm will be saved at power-off
- Alarm summary displays alarm history on the screen
- desired status can be displayed on the screen
- Alarm on/off action can be specified (supports open page/command expression)
- Enables to change font and size of alarm summary object
- Provides alarm recognition functionalities
- Supports customized alarm summary control button

Script

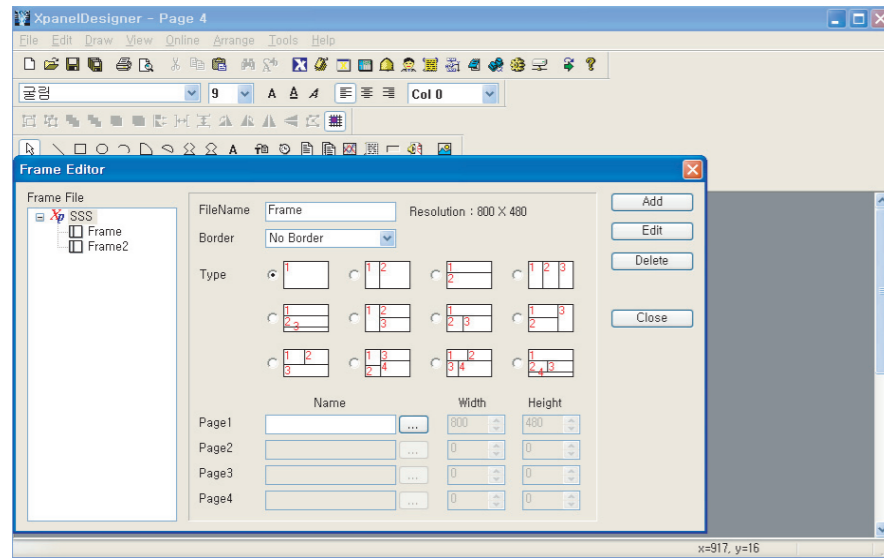
- Scripts are activated to execute by event, time period or function call
- Supports script language of C syntax
- Internal script function can control the advanced features of Xpanel
- Enables to call user-defined function

Data Log



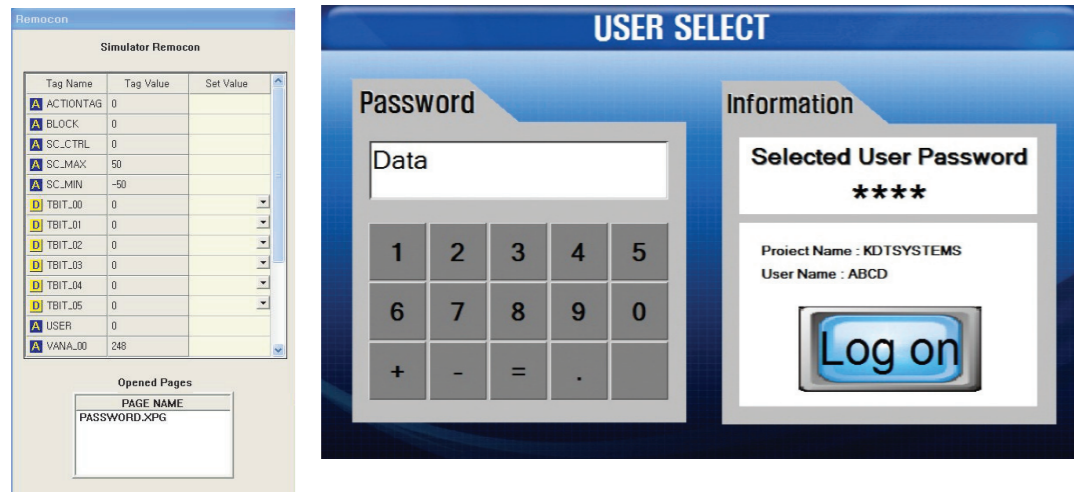
- Enables to create up to 32 data blocks (each data block can store up to 2048)
- Collected data through data collect object can be displayed on table
- Collected data through scope trend can be displayed on graph

■ Frame Editor



- Provides split-screen
- The structure and the size of the frame can be edited
- Provides various forms of frame

■ Simulator



- Enables to precheck the project on the PC without the Xpanel
- Enables to modify the tag value on the simulator remote control window
- Runs on the PC with the same resolution as the real screen
- Enables to check the scripts and the alarm

Dimension

Unit : mm

Model	Dimensions (mm)	Panel cut (mm)
XT04CD	<ul style="list-style-type: none"> Dimensions: 128 (width), 102 (height), 92 (depth), 50 (bottom depth), 118 (bottom width) 	<ul style="list-style-type: none"> Panel cut: 120 (width), 84 (height)
XT07CD	<ul style="list-style-type: none"> Dimensions: 176 (width), 127 (height), 118 (depth), 50 (bottom depth), 185 (bottom width) 	<ul style="list-style-type: none"> Panel cut: 177 (width), 119 (height)
XT08CD	<ul style="list-style-type: none"> Dimensions: 227.5 (width), 176.5 (height), 118 (depth), 59.5 (bottom depth), 215 (bottom width) 	<ul style="list-style-type: none"> Panel cut: 217 (width), 166 (height)
XT10CD	<ul style="list-style-type: none"> Dimensions: 280 (width), 220 (height), 206 (depth), 47 (bottom depth), 266 (bottom width) 	<ul style="list-style-type: none"> Panel cut: 267 (width), 207 (height)
XT12CD	<ul style="list-style-type: none"> Dimensions: 330 (width), 250 (height), 238 (depth), 83 (bottom depth), 318 (bottom width) 	<ul style="list-style-type: none"> Panel cut: 319 (width), 239 (height)
XT15CD	<ul style="list-style-type: none"> Dimensions: 395 (width), 310 (height), 206 (depth), 89 (bottom depth), 381 (bottom width) 	<ul style="list-style-type: none"> Panel cut: 382 (width), 297 (height)

CIMON-XPANEL



XT04CD-DN

4.3" LCD DISPLAY
DC

XT07CD-DN

7" LCD DISPLAY
DC

XT07CD-AN

7" LCD DISPLAY
AC

XT04CD-DE

4.3" LCD DISPLAY
ETHERNET
DC

XT07CD-DE

7" LCD DISPLAY
ETHERNET
AUDIO
SD CARD
DC

XT07CD-AE

7" LCD DISPLAY
ETHERNET
AUDIO
SD CARD
AC

NEW XT08CD-D

8" LCD DISPLAY
ETHERNET
SD CARD
DC

XT10CD-D

10.4" LCD DISPLAY
ETHERNET
SD CARD
DC

XT12CD-A

12.1" LCD DISPLAY
ETHERNET
SD CARD
AC

NEW XT08CD-A

8" LCD DISPLAY
ETHERNET
SD CARD
AC

XT10CD-A

10.4" LCD DISPLAY
ETHERNET
SD CARD
AC

XT15CD-A

15.1" LCD DISPLAY
ETHERNET
SD CARD
AC

» Specification

Type	XT04CD-DN	XT04CD-DE	XT07CD-DN	XT07CD-AN	XT07CD-DE	XT07CD-AE
Panel Size	4.3"		7"			
Resolution	480 x 272		800 x 480			
LCD	Color TFT					
Color	262K Colors					
Luminance	400 cd/m ²					
Memory	128MByte DDR2 SDRAM					
Storage	128MByte SLC NAND Flash					
Operating System	Windows CE 6.0					
Programming Tool (HMI)	Xpanel Designer					
Audio	None				1 Port	
Interface	Ethernet	None	10/100 BaseT	None	10/100 BaseT	
	Serial (COM1)	RS232C				
	Serial (COM2)	RS422/485				
	Serial (COM3)	None				
	USB Host	1 Port				
	Tool Port	1 Port (for Loader)				
	SD Card Slot	None				1 Slot
Input Power	DC24V		DC24V	AC100-240V	DC24V	AC100-240V
Dimension(mm)	128 X 102 X 50		185 X 127 X 50			
Panel Cut(mm)	120 X 94		177 X 119			

Type	XT08CD-A	XT08CD-D	XT10CD-D	XT10CD-A	XT12CD-A	XT15CD-A
Panel Size	8"		10.4"		12.1"	15"
Resolution			800 x 600		1024 x 768	
LCD	Color TFT					
Color	262K Colors				16.7M Colors	
Luminance	350cd/m ²		400 cd/m ²		450 cd/m ²	400 cd/m ²
Memory	128MByte DDR2 SDRAM		256MByte DDR2 SDRAM			
Storage	128MByte SLC NAND Flash					
Operating System	Windows CE 6.0		Windows Embedded Compact 7			
Programming Tool (HMI)	Xpanel Designer					
Audio	None					
Interface	Ethernet	10/100 BaseT				
	Serial (COM1)	RS232		RS422/485		
	Serial (COM2)	RS422/485		RS232C		
	Serial (COM3)	None		RS232C		
	USB Host	1 Port				
	Tool Port	1 Port (for Loader)				
	SD Card Slot	1 Slot				
Input Power	AC100-240V		DC24V		AC100-240V	
Dimension(mm)	227.5 X 176.5 X 59.5		280 X 220 X 47		330 X 250 X 83	395 X 310 X 89
Panel Cut(mm)	217 X 166		267 X 207		319 X 239	382 X 297

CIMON HYBRID XPANEL (HMI+PLC)



Cost effective solution with high performance
 Reduce wiring and programming time
 7" touch screen with Relay DI8/DO8
 Ethernet & Serial (RS232/RS485) option
 Modbus TCP, Modbus RTU
 VNC Server
 Maximum 3 PLC-S modules expansion
 More than 2,000 images for application

HYBRID XPANEL LINE UP

No.	Model	Type
1	CM-HP07CD-DNR	XT07 + No LAN + PLC(CPU, RS232C), DC Type
2	CM-HP07CD-ANR	XT07 + No LAN + PLC(CPU, RS232C), AC Type
3	CM-HP07CD-DNS	XT07 + No LAN + PLC(CPU, RS485), DC Type
4	CM-HP07CD-ANS	XT07 + No LAN + PLC(CPU, RS485), AC Type
5	CM-HP07CD-DER	XT07 + LAN + PLC(CPU, RS232C), DC Type
6	CM-HP07CD-AER	XT07 + LAN + PLC(CPU, RS232C), AC Type
7	CM-HP07CD-DES	XT07 + LAN + PLC(CPU, RS485), DC Type
8	CM-HP07CD-AES	XT07 + LAN + PLC(CPU, RS485), AC Type

Option

No.	Model	Type
1	CM-HP-DM	Expansion dummy for Xpanel-Hybrid
2	CM-HP-EAA	Analog module (AI 2ch, AO 2ch) for Xpanel-Hybrid

PLC-S LINE UP

Digital I/O

No.	Model	Type	Specification
1	CM3-SP32EDO	DI-32	DI 32 pts, DC 24V
2	CM3-SP32EOT	DO-32	DO 32 pts, DC 24V TR (Sink)
3	CM3-SP32EOC	DO-32	DO 32 pts, DC 24V TR (Source)
4	CM3-SP16EOR	DO-16	DO 16 pts, Relay Output
5	CM3-SP32EDT	DI-16 / DO-16	DI 16 pts, DO 16 pts, TR (Sink)

Analog I/O & Temp. Measuring

No.	Model	Type	Specification
1	CM3-SP04EAO	AI-4	AI 4ch (0-5V, 1-5V, 0-10V, -10-10V, 0-20mA, 4-20mA)
2	CM3-SP04EAA	AIO-4	AI 2ch / AO 2ch (0-5V, 1-5V, 0-10V, -10-10V, 0-20mA, 4-20mA)
3	CM3-SP04EOAI	AO-4	AO 4ch Current Output (4-20mA)
4	CM3-SP04EOAV		AO 4ch Voltage Output (-10-10V, 0-10V)
5	CM3-SP04ERO	Temp.	4ch RTD (PT100, JPT100, PT1000, NI1000)
6	CM3-SP04ETO		4ch TC (K, J, E, T, B, R, S, N)

Communication

No.	Model	Type	Protocol
1	CM3-SP02ERS	RS232C 1ch, RS422/485 1ch	CICON, CIMON HMI, MODBUS/RTU Slave & Master, Protocol Program
2	CM3-SP02ERR	RS232C 2ch	CICON, CIMON HMI, MODBUS/RTU Slave & Master, Protocol Program
3	CM3-SP01EET	Ethernet (10BaseT, 100BaseTX)	CICON, CIMON HMI, MODBUS/TCP Slave & Master, Protocol Program, DHCP

Accessories

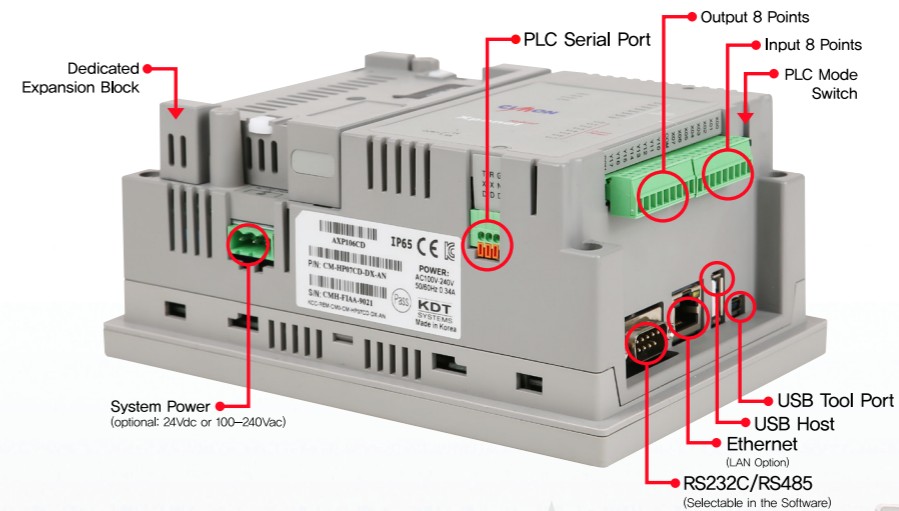
No.	Model	Type	Protocol
1	CM0-TM32M	SP32MDT	Multi-Terminal
2	CM0-SCB15M	SP32MDT	Main Block 1.5M Cable
3	CM0-SCB15E	SP32EDO, SP32EOT	I/O 32pts, 1.5M Cable

VESA Wall Mount Ready

100X100mm standard VESA Wall Mount Hole is equipped on the back for easy attachment to a VESA mounting arm.

Expandible with PLC-S Modules

Existing PLC-S expansion modules work with Xpanel Hybrid. (Maximum 2 PLC-S expansion modules can be used)



High Reliability

The reliability required in the PLC is equally applied to Xpanel Hybrid.

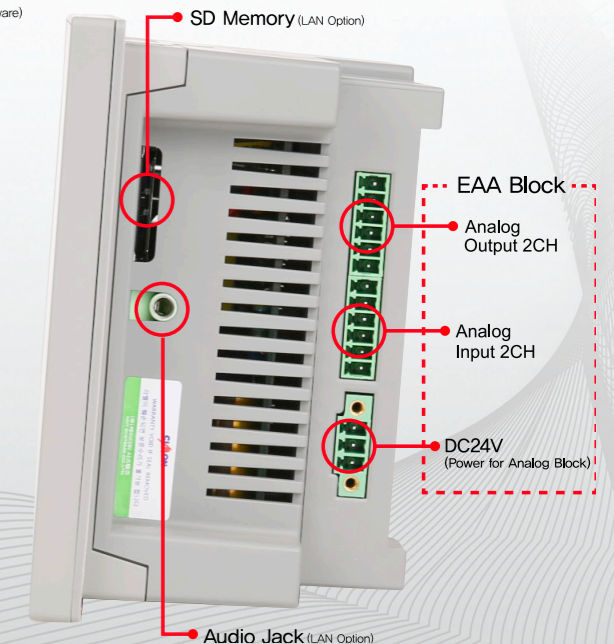
Highly reliable vibration resistance, temperature resistance, surge resistance, etc

Detachable PLC Terminal

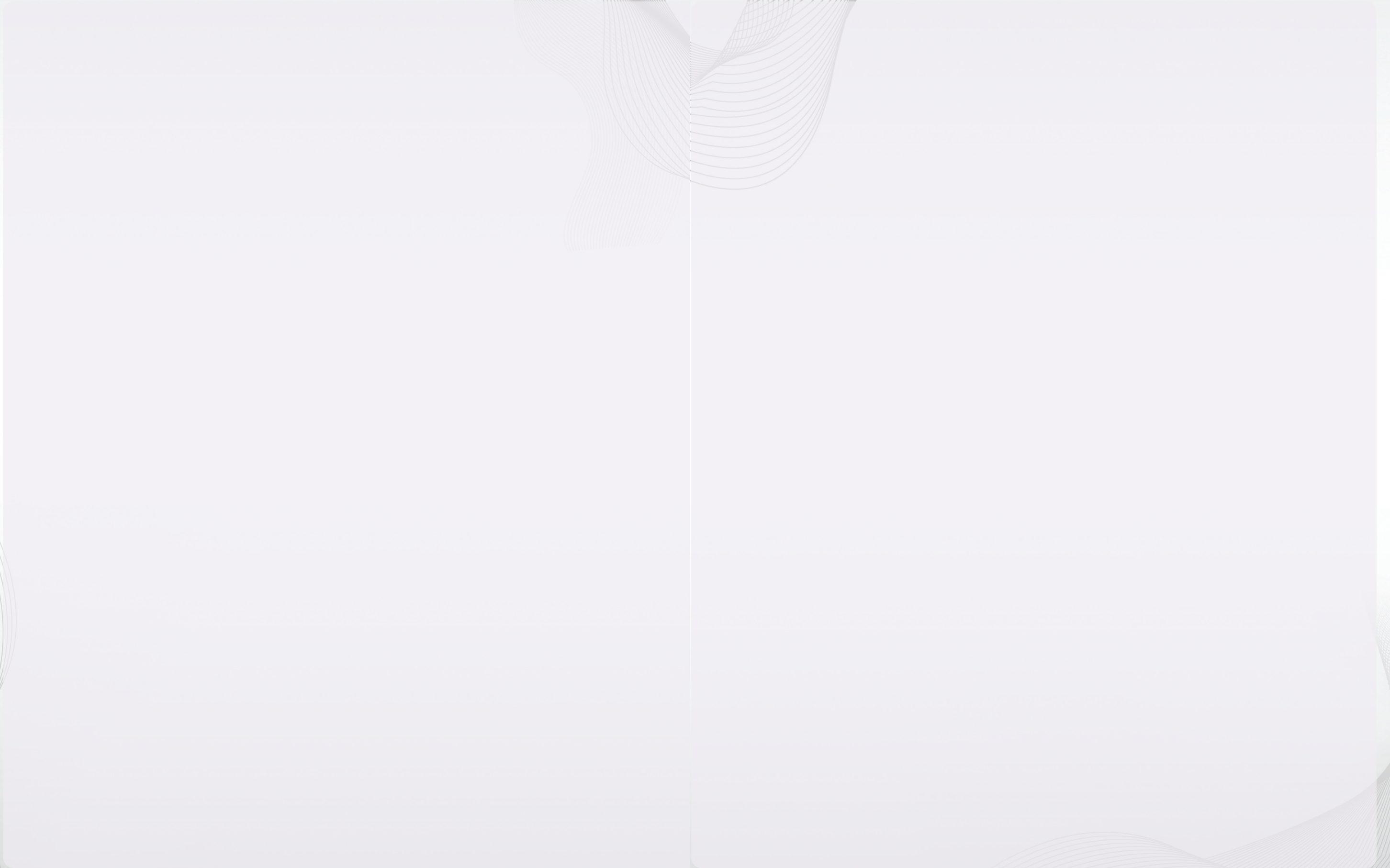
Every connection terminal is detachable for convenient installation and maintenance. USB Hub is built-in for simultaneous connection with XpanelDesigner and CICON.

Genuine PLC Integrated

A true PLC is integrated with HMI to support the full functionalities of PLC-S and Xpanel.



MEMO



The logo for KDT SYSTEMS is centered on a black background. It features the letters 'KDT' in a large, bold, white sans-serif font, with a thin white horizontal line above and below the letters. Below 'KDT', the word 'SYSTEMS' is written in a smaller, all-caps, white sans-serif font, also with a thin white horizontal line above and below it.

KDT SYSTEMS

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