

Highlight Information

- Runtime InduSoft Web Studio Inside
- ISaGRAF Ver.3 SoftLogic Inside (IEC 61131-3)
- PXA270 CPU (32-bit & 520 MHz)
- 128 MB SDRAM & 96 MB Flash
- IP65 Compliant Front Panel
- 3.5"/5.7" TFT LCD and Rubber Keypad
- Audio with Microphone-In and Earphone-Out
- 3 I/O Expansion Slots for VP-23W6/25W6
- One or two 10/100M Ethernet Ports
- 2 or 3 Serial Ports (RS-232, RS-485)
- DCON Bundle Driver is Provided
- Protocol Support: MODBUS, OPC DDE, SNMP...etc.
- Supports IEC 61131-3 Standard PLC Programming Languages
- Host Application via Regular Web Browser
- Operating Temperature: -20 ~ +70 °C



3

ViewPAC

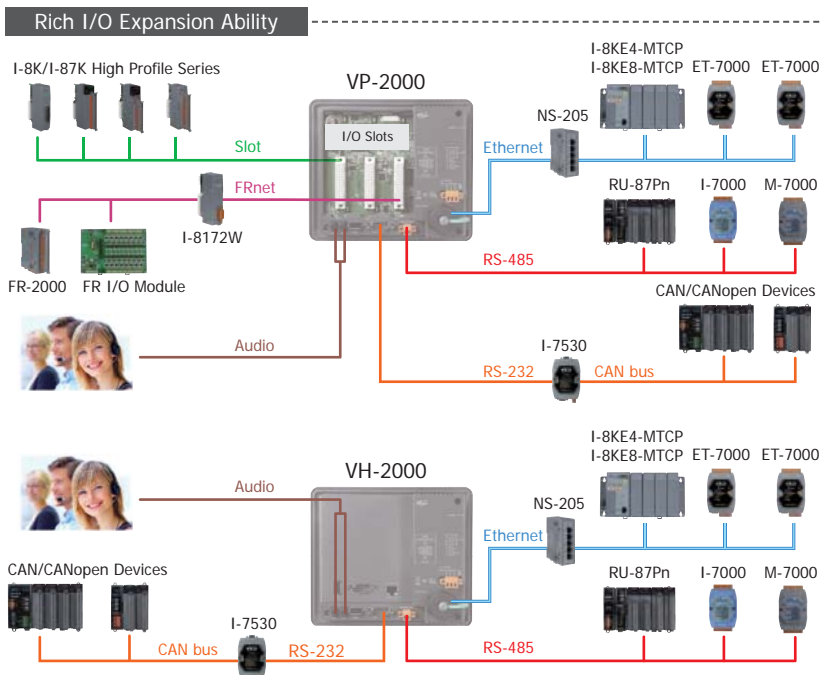
Introduction

VP-23W6/25W6 and VH-23W6/25W6 series are the new generation Windows CE .NET 5.0 based InduSoft and ISaGRAF PACs of ICP DAS. ViewPAC combines WinPAC, color graphic display and keypad in one unit. It is equipped with a PXA270 CPU (520 MHz), various connectivity (USB, Ethernet, RS-232/485), 3 I/O slots, 3.5"/5.7" TFT LCD and a rubber keypad. ViewPAC has hard real-time capability, small core size, fast boot speed, interrupt handling at a deeper level and achievable deterministic control by running Windows CE .NET 5.0 operating system.

InduSoft Web Studio is a powerful, integrated collection of automation tools that includes all the building blocks needed to develop modern Human Machine Interfaces (HMI), Supervisory Control and Data Acquisition (SCADA) systems, and ViewPAC applications.

ISaGRAF is the most powerful SoftLogic package on the market. ISaGRAF is a PLC-like software and it supports IEC 61131-3 standard PLC programming languages (LD, FBD, SFC, ST, IL, FC), and can run the application generated by the workbench on any ISaGRAF PACs.

Applications



Features

Software

- Windows CE .NET 5.0 Operating System
 - FTP Server
 - VCEP Software
 - Built-in OPC Server: Quicker
 - Provides Library for eVC, C# or VB .NET
- InduSoft Web Studio v6.1 Inside
 - Full-Featured WinCE-based run-time environment
 - Conform to Industry Standards: OPC, DDE, SNMP.
 - Full-Featured web Thin Client solution
- ISaGRAF Ver.3 SoftLogic
 - Easy Integrating to HMI/SCADA/MMI
 - Support CAN/CANopen (via I-7530W)
 - Support Ebus Data Exchange
- Support Modbus Master & Slave Protocols
- Support FRnet I/O (via I-8172W)
- Support Wireless Communication & SMS
- Development Software
 - InduSoft Web Studio
 - ISaGRAF Ver.3 SoftLogic
 - Visual Studio .NET 2003/2005/2008 and eVC

Hardware

- PXA270 CPU (32-bit & 520 MHz)
- IP65 Compliant Front Panel
- 3.5"/2.7" TFT LCD (5.7" LCD is with Touch Panel)
- Rubber Keypad with 24/6 Keys
- Audio with Microphone-In and Earphone-Out
- 3 Slots for High Profile I/O Modules (VP Series)
- 64-bit Hardware Serial Number for Software Protection
- Built-in Flash Disk (31 MB)
- Dual Battery Backup SRAM (512 KB)
- Rich I/O Expansion Ability
 - Ethernet
 - RS-232/422/485
 - FRnet
 - CAN Bus
- Operating Temperature: -20 ~ +70 °C

3

ViewPAC-2000 Series

VP-23W6/VP-25W6/VH-23W6/VH-25W6

Specifications

3

ViewPAC

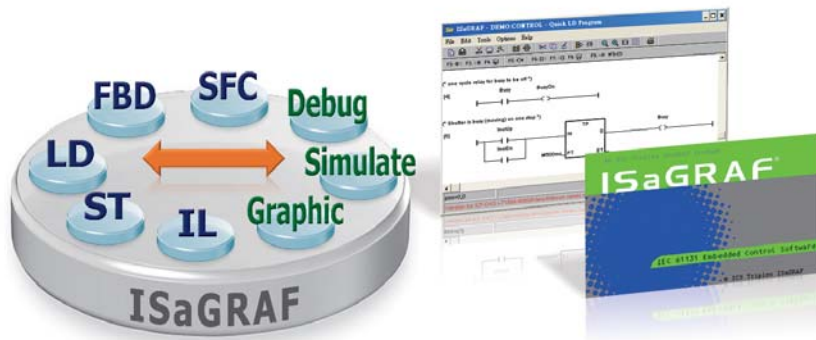
Models	VP-23W6	VP-25W6	VH-23W6	VH-25W6
System Software				
OS	Windows CE 5.0			
.Net Compact Framework	2.0			
Embedded Service	FTP server, Web server (supports VB script, JAVA script), Embedded SQL server			
SDK Provided	DII for eVC, DII for Visual Studio.Net 2003/2005/2008			
Development Software				
InduSoft Software	InduSoft Web Studio v6.1 Service Pack 6			
ISaGRAF Software	ISaGRAF Version 3: IEC 61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC			
Others	Options: Microsoft EVC+ +4.0 or VS .NET 2003/2005/2008 (VB .NET 2003/2005/2008, C# .NET 2003/2005/2008)			
Web Service				
Web HMI	Support Web HMI function, PC running Internet Explorer can access VP-2xW6 via Local Ethernet or Internet or dial Modem, monitoring and control.			
Security	Web HMI supports three-level user name and password protection			
CPU Module				
CPU	PXA270 or compatible (32-bit and 520 MHz)		PXA270 or compatible (32-bit and 312 MHz)	
SDRAM	128 MB			
Dual Battery Backup SRAM	512 KB (for 5 years data retention)			
Flash	96 MB (64 MB for OS image, 31 MB for built-in Flash disk, 1 MB for registry)			
EEPROM	16 KB Data Retention: 40 years; 1,000,000 erase/write cycles			
Expansion Flash Memory	microSD socket with one 2 GB microSD card (support up to 16 GB microSDHC card)			
RTC (Real Time Clock)	Provide second, minute, hour, date, day of week, month, year			
64-bit Hardware Serial Number	Yes			
Dual Watchdog Timers	Yes (0.8 second)			
Rotary Switch	Yes (0 ~ 9)			
VGA & Communication Ports				
Ethernet	RJ-45 x 1, 10/100 Base-TX (Auto-negotiating , LED indicators)		RJ-45 x 2, 10/100 Base-TX (Auto-negotiating , LED indicators)	
USB 1.1 (host)	1		2	
USB 1.1 (client)	-		1	
COM 0	Internal communication with the high profile I-87K series modules in slots			
COM 1	-		RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI and GND); Non-isolated	
COM 2	RS-485	D2+, D2-; self-tuner ASIC inside		
	Isolation	2500 V _{dc}		
COM 3	RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI and GND); Non-isolated			
MMI (Man Machine Interface)				
LCD	3.5" TFT (Resolution 320 x 240)	5.7" TFT (Resolution 640 x 480)	3.5" TFT (Resolution 320 x 240)	5.7" TFT (Resolution 640 x 480)
Touch Panel	-	Yes	-	Yes
Rubber Keypad	24 keys	6 Keys	24 keys	6 Keys
Audio	Microphone-In and Earphone-Out			
LED Indicators	3 Dual-Color LEDs (PWR, RUN, LAN1, L1, L2, L3; L1 ~ L3 for User Programmable)			
I/O Expansion Slots				
Slot Number	3 (For High Profile I-8K and I-87K Modules Only)		-	
Hot Swap * Will be available	For High Profile I-87K Modules Only		-	
Mechanical				
Dimensions (W x H x D)	182 mm x 158 mm x 125 mm			
Installation	Panel Mounting			
Ingress Protection	Front panel: IP65			
Environmental				
Operating Temperature	-20 ~ +70 °C			
Storage Temperature	-30 ~ +80 °C			
Ambient Relative Humidity	10 ~ 90% RH (non-condensing)			
Power				
Input Range	+10 ~ +30 V _{dc}			
Isolation	1 kV			
Capacity	2.5 A, 5 V supply to I/O expansion slots			
Consumption	7.2 W (0.3 A @ 24 V _{dc})			

3

ViewPAC-2000 Series

VP-23W6/VP-25W6/VH-23W6/VH-25W6

ISaGRAF Specifications



3

ViewPAC

Protocols (some protocols need optional devices)		
Modbus TCP/IP Master	Link to max. 100 devices that support Standard Modbus TCP/IP Slave protocol (FAQ-113)	
Modbus RTU/ASCII Master	Support Multi-port. Max. 10 ports: COM2, 3 and COM5 ~ 14 (Expansion boards must be plugged in slot 0 ~ 3)	
Modbus RTU Slave	Max. 5 Ports: one of COM2/3, COM5 ~ 8.	
Modbus TCP/IP Slave	Yes, up to 32 connections.	
Web HMI Protocol	Ethernet Ports for connecting PC running Internet Explorer	
I-7000 & I-87K RS-485 Remote I/O	One of COM2 or COM3 I-7000 I/O modules, I-87K base + I-87K Serial I/O boards and RU-87Pn + I-87K High Profile I/O boards as Remote I/O. Max. 255 modules for one controller.	
M-7000 Series Modbus I/O	Max. 10 RS-485 ports (COM2, 3, 5 ~ 14) can support M-7000 I/O. Each port can connect up to 32 M-7000 Modules.	
Modbus TCP/IP I/O	Support ICP DAS Ethernet I/O: I-8KE4-MTCP and I-8KE8-MTCP.	
FRnet I/O	Max. 3 pcs. I-8172W boards in slot 0 to 2 to connect to FRnet I/O modules. Each I-8172w board can connect up to 256 DI plus 256 DO channels.	
Send Email	Support functions to send email with one attached file via Ethernet port.	
Ebus	To exchange data between ISaGRAF Ethernet PAC via Ethernet port. (LAN1 Port only)	
SMS: Short Message Service	COM3 or COM5 can link to a GSM Modem to support SMS. User can request data/control the controller by cellular phone. The controller can also send data & alarms to user's cellular phone. Optional GSM Modems: GTM-201-RS232 (850/900/1800/ 1900 GSM/ GPRS External Modem)	
User-Defined Protocol	COM2, 3 and COM5 ~ COM14 by Serial communication function blocks	
MMICON/LCD	COM3 or COM5 supports ICP DAS's MMICON.	
UDP Server & UDP Client : Exchange Message & Auto-Report	Support UDP Server and UDP Client protocol to send/receive message to/from PC/HMI or other devices.	
TCP Client : Exchange Message & Auto-Report	Support TCP Client protocol to send/receive message to/from PC/HMI or other devices which support TCP server protocol. Ex: automatically report data to InduSoft's RXTX driver, or to connect a location camera.	
CAN/CANopen	COM3 or COM5 ~ COM14 can connect one I-7530 (Converter: RS-232 to CAN) to support CAN/CANopen devices and sensors. One VP-2xW7 supports max.10 RS-232 ports to connect max.10 I-7530.	
Counter, Encoder, Frequency		
PWM Output	High Speed PWM Module	I-8088W, 8-ch. PWM outputs, 10 Hz ~ 500 kHz (non-continuous), duty: 0.1 ~ 99.9%
	DO Module as PWM	8-ch. max. 250 Hz max. For Off=2 & On=2 ms. Output square wave: Off: 2 ~ 32766 ms, On: 2 ~ 32766 ms. Optional DO Boards: I-8037W, 8041W, 8041AW, 8042W, 8050W, 8054W, 8055W, 8056W, 8057W, 8060W, 8063W, 8064W, 8068W, 8069W (Relay Output boards can not generate fast square pulse)
Counter, Encoder, Frequency	Parallel DI Counter	8-ch. max. for 1 controller. Counter val: 32-bit. 250 Hz max. Min. ON & OFF width must > 2 ms. Optional DI Boards: I-8040W, 8040PW, 8042W, 8048W...
	Serial DI Counter	Counter input: 100 Hz max. Counter value: 0 ~ 65535 (16-bit). Optional Serial I-87K DI Boards: I-87040W, 87046W, 87051W, 87052W, 87053W, 87054W, 87055W, 87058W, 87059W, 87063W.
	Remote DI Counter	All I-7K/I-87K DI modules support counters. 100 Hz max. Value: 0 ~ 65535
	High Speed Counter	I-8084W: 250 kHz max. 32 bit I-87082W: 100 kHz max. 32 bit; I-87088W: 500 kHz max. 32 bit
	Encoder	I-8093W : 3-axis Encoder Module, max. 1M Hz for quadrant input mode, max. 4 MHz for pulse/direction and cw/ccw input mode. (FAQ-112) I-8084W: 250 kHz max. , 4-ch encoder, can be dir/pulse, or up/down or A/B phase (Quad. mode), No support Encoder Z-index. (FAQ-100)
Frequency		I-87082W: 2-ch, 1 Hz ~ 100 kHz; I-87088W: 8-ch, 0.1 Hz ~ 500 kHz; I-8084W: 8-ch, 1 Hz ~ 250 kHz;
	Motion Control	With one I-8091W (2-axis) or two I-8091W (4-axis), only one I-8091W can do X-Y dependent motion

3

ViewPAC-2000 Series

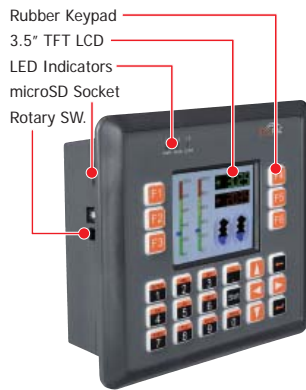
VP-23W6/VP-25W6/VH-23W6/VH-25W6

InduSoft Features

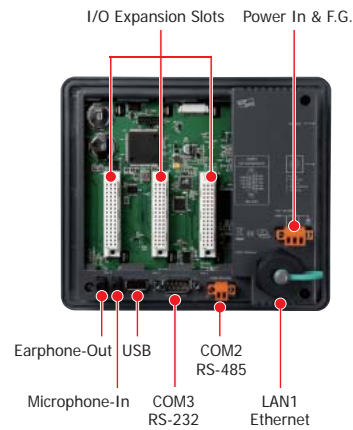
- Elegant Graphics
- Multi-Language
- Database (Access, Excel, SQL, Oracle...)
- Recipes and Reports
- Online and History Alarm / Event / Trend
- Various Communication Driver (DCON, Modbus, OPC, DDE, TCP/IP...)
- Remote Web Client Control & Security
- ActiveX (GSM / SHM / COM /WEB provided by ICP DAS)
- System Redundancy
- Online Configuration and debugging
- Others (VBScript, E-mail, FTP, SNMP...)

Appearance

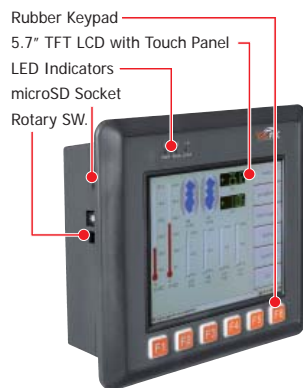
VP-23W6/VH-23W6



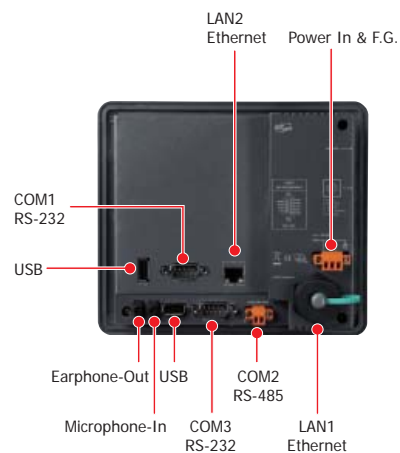
VP-23W6/25W6



VP-25W6/VH-25W6

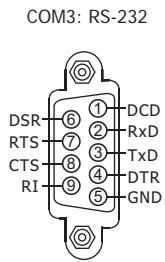


VH-23W6/25W6

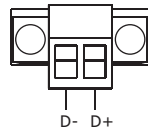


Pin Assignments

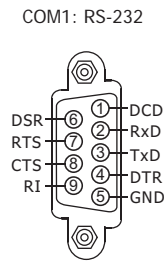
VP-23W6/25W6 COM Port



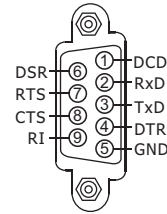
COM2: RS-485



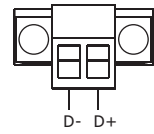
VH-23W6/25W6 COM Port



COM3: RS-232

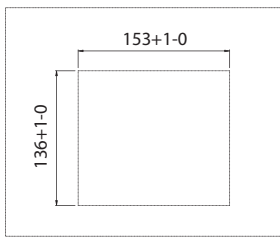


COM2: RS-485



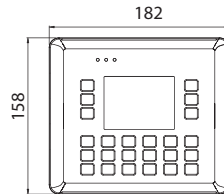
Dimensions (Unit: mm)

VP-2000 Series



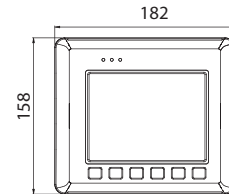
Recommended Panel Cut-Out

VP-23W6/VH-23W6



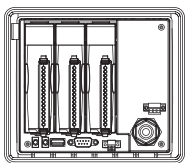
Front View

VP-25W6/VH-25W6

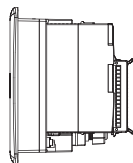


Front View

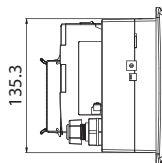
VP-2xW6



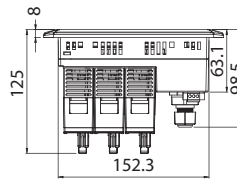
Back View



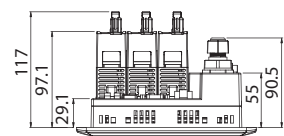
Left Side View



Right Side View

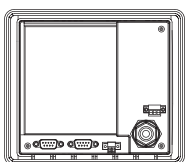


Top View

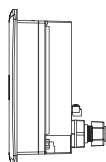


Bottom View

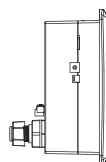
VH-2xW6



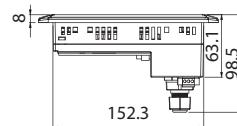
Back View



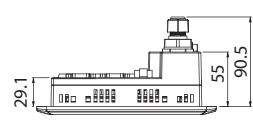
Left Side View



Right Side View



Top View



Bottom View

Ordering Information

VP-23W6-EN CR	InduSoft and ISaGRAF based ViewPAC with 3.5" LCD and 3 I/O slots (Multilanguage Version of OS) (RoHS)
VP-25W6-EN CR	InduSoft and ISaGRAF based ViewPAC with 5.7" LCD and 3 I/O slots (Multilanguage Version of OS) (RoHS)
VP-23W6-TC CR	InduSoft and ISaGRAF based ViewPAC with 3.5" LCD and 3 I/O slots (Traditional Chinese of OS) (RoHS)
VP-25W6-TC CR	InduSoft and ISaGRAF based ViewPAC with 5.7" LCD and 3 I/O slots (Traditional Chinese of OS) (RoHS)
VP-23W6-SC CR	InduSoft and ISaGRAF based ViewPAC with 3.5" LCD and 3 I/O slots (Simplified Chinese of OS) (RoHS)
VP-25W6-SC CR	InduSoft and ISaGRAF based ViewPAC with 5.7" LCD and 3 I/O slots (Simplified Chinese of OS) (RoHS)
Note: The default runtime license (CEView Lite Plus - 300 tags and 3 driver) is installed.	

Accessories

ISaGRAF Development Software	
ISaGRAF-256-E	ISaGRAF Workbench Software Ver.3 (256 I/O Tags) with One Application Book (English version) and one USB Dongle
ISaGRAF-256-C	ISaGRAF Workbench Software Ver.3 (256 I/O Tags) with One Application Book (Chinese version) and one USB Dongle
ISaGRAF-32-E	ISaGRAF Workbench Software Ver.3 (32 I/O Tags) with One Application Book (English version) Note: No upgrade service from ISaGRAF-32 to ISaGRAF-256. (Using ISaGRAF-32 can control more than 32 I/O tags. Please refer to ISaGRAF User's Manual Ch. 3.4)
ISaGRAF-32-C	ISaGRAF Workbench Software Ver.3 (32 I/O Tags) with One Application Book (Chinese version) Note: No upgrade service from ISaGRAF-32 to ISaGRAF-256. (Using ISaGRAF-32 can control more than 32 I/O tags. Please refer to ISaGRAF User's Manual Ch. 3.4)
InduSoft Development Software	
InduSoft-NT512000D	Advanced Server for Windows NT/2000/XP (512,000 Tags, unlimited drivers)
InduSoft-NT64000D	Control Room for Windows NT/2000/XP (64,000 Tags, 8 drivers)
InduSoft-NT4000D	Operator Workstation for Windows NT/2000/XP (4,000 Tags, 5 drivers)
InduSoft-NT1500D	Local Interface for Windows NT/2000/XP (1500 Tags, 3 drivers)
InduSoft-NT300D	NTView PRO for Windows NT/2000/XP (300 Tags, 3 drivers)
InduSoft Runtime License	
InduSoft-CE1500R	CEView standard for Windows CE Run-time (CE View)(1500 Tags, 3 drivers)
InduSoft-CE300R	CEView Lite Plus for Windows CE Run-time (300 Tags, 3 drivers)
Power Supply	
DP-660	24 Vdc/2.5 A, 60 W and 5 Vdc/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting
MDR-20-24	24 Vdc/1.0 A, 24 W Power Supply with DIN-Rail Mounting
MDR-60-24	24 Vdc/2.5 A, 60 W Power Supply with DIN-Rail Mounting