

Features

- LCD Size: 12.1", 15", 17" with Touch Panel
- N2600 (1.6 GHz) or E3827 (1.75 GHz) CPU
- WES7 (Windows Embedded Standard 7)
- Support eLogger HMI (free)
- 3 I/O Expansion Slots
- NEMA 4/IP65 Compliant Front Panel
- Ultra-Rugged Construction and Reliable Design
- Operating Temperature : -10 °C ~ +60 °C



Introduction

The VP-x641-WES7 and VP-x741-WES7 series are WES7 based ViewPAC that combine computing, I/O, and operator interface into a single unit, and provide the perfect solution for integrating HMI, data acquisition and control in an individual PAC. It is equipped with an Intel Atom N2600/E3827 CPU, three I/O expansion slots, TFT LCD and a variety of connectives including dual Gigabit Ethernet, USB port, RS-232 and RS-485 interface. The operating system is pre-installed in the built-in mSATA SSD, and the storage can be expanded from a Compact Flash slot. Local I/O slots are available to use our I-8K and I-87K series I/O modules and remote I/O expansion is available to use our Ethernet I/O modules and RS-485 I/O modules. Designed for panel mount installation, the front panel is NEMA 4/IP65 rated and can withstand sprayed water, humidity and extreme dust. Designed to operate over a wide -10°C ~ 60°C ambient temperature range, the fanless design offers the ultimate in reliability with no moving parts.

Since WES7 has the same Win32 API as Windows 7, most popular applications on desktop can run on WES7 based ViewPAC.

WES7 Embedded OS

WES7 has the same Win32 API as Windows 7. Most popular applications on desktop can be run on WES7. It's also compatible with rich Windows IDEs, such as Visual studio, Delphi, Borland C++ Builder, etc.



- Full Win32 API
- Remote Desktop Protocol 5.1
- Silverlight 5
- Enhanced Write Filter
- MS SQL Server 2012 Express
- .NET Framework 3.5 SP1, 4.0, 4.5

Specifications

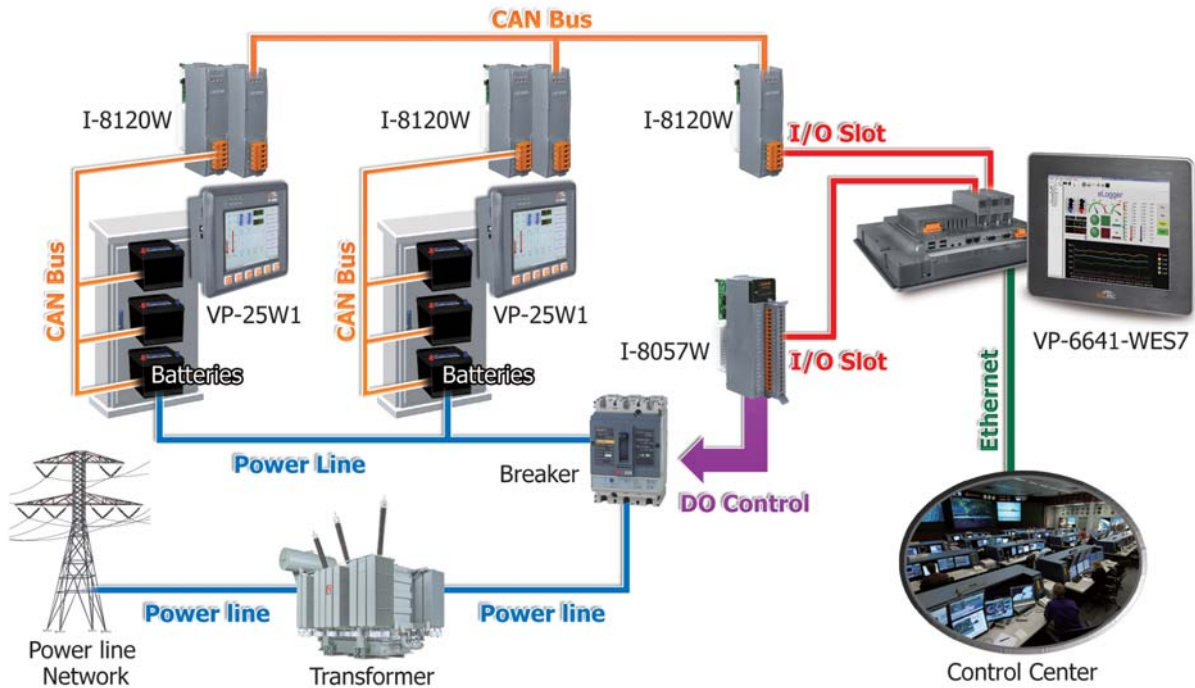
| Models | VP-5741-WES7 | VP-6741-WES7 | VP-7741-WES7 |
|----------------------------------|--|-------------------------|-----------------|
| | | VP-6641-WES7 | |
| System Software | | | |
| OS | Microsoft Windows Embedded Standard 7 SP1 | | |
| Framework Support | .Net Framework 3.5 SP1, 4.0, 4.5 | | |
| Embedded Service | IE11, FTP Server, IIS 7.0, ASP (Java Script, VB Script) | | |
| SDK Provided | DII for Visual Studio.Net | | |
| Multilanguage Support | English, German, French, Spanish, Portuguese, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese | | |
| CPU Module | | | |
| CPU | E3827 (1.75 GHz, 64-bit dual core): for VP-x741-WES7 N2600 (1.6 GHz, 64-bit dual core): for VP-6641-WES7 | | |
| SDRAM (DDR3) | 2 GB | | |
| MRAM | 128 KB | | |
| Flash (SSD) | mSATA slot with one 16 GB SSD | | |
| EEPROM | 16 KB | | |
| Memory Expansion | CF slot with a 8 GB CF card (support up to 32 GB) | | |
| RTC (Real Time Clock) | Provide second, minute, hour, date, day of week, month, year | | |
| 64-bit Hardware Serial Number | Yes, for software copy protection | | |
| Dual Watchdog Timers | Yes (0.8 second) | | |
| Rotary Switch | Yes (0 ~ 9) | | |
| Communication Ports | | | |
| Ethernet | 2 x RJ-45 10/100/1000 Base-TX | | |
| USB 2.0 | 2 | 4 | |
| COM 2 | RS-232 (Rx/D, Tx/D, CTS, RTS, DSR, DTR, CD, RI and GND); Non-isolated | | |
| COM 3 | RS-485 (Data+, Data-, GND); 2500 V _{dc} isolated | | |
| COM 4 | RS-232/RS-485 (Rx/D, Tx/D, CTS, RTS and GND for RS-232, Data+ and Data- for RS-485); 2500 V _{dc} isolated | | |
| Audio | Earphone-out | Mic-in and earphone-out | |
| LCD | | | |
| Diagonal Size | 12.1" | 15" | 17" |
| Resolution | 800 x 600 | 1024 x 768 | 1280 x 1024 |
| Brightness (cd/m ²) | 400 | | 350 |
| Contrast Ratio | 500 : 1 | | |
| LED Backlight Life (hrs) | 50,000 | | |
| Touch Panel | Yes, 5-wire, resistive type; light transmission: 80 % | | |
| LED Indicator | 4 (Run, PWR, L1, L2; L1 and L2 for user programmable) | | |
| I/O Expansion Slots | | | |
| Slot Number | 3 (Support High Profile I-8K and I-87K Modules) | | |
| Mechanical | | | |
| Dimensions (W x H x D), Unit: mm | 323 x 254 x 139 | 381 x 305 x 139 | 413 x 359 x 144 |
| Panel Cut-Out (W x H), Unit: mm | 309 x 240, ±1 | 364 x 288, ±1 | 393 x 339, ±1 |
| Installation | Panel Mounting | | |
| Ingress Protection | Front panel: NEMA 4/IP65 | | |
| Environmental | | | |
| Operating Temperature | -10 °C ~ +60 °C | | |
| Storage Temperature | -20 °C ~ +70 °C | | |
| Ambient Relative Humidity | 10 % ~ 90 % RH (non-condensing) | | |
| Power | | | |
| Input Range | +10 V _{dc} ~ +30 V _{dc} | | |
| Redundant Power Inputs | Yes | | |
| Isolation | 1 kV | | |
| Consumption | 20 W | 25 W | 27 W |

Applications

Energy Storage System

Products: VP-6641-WES7, VP-25W1, I-8120W, I-8057W

This application improves the usage efficiency of electrical power. During the off-peak time for electricity use, the unused electricity can be stored in batteries. During peak time, these batteries then supply power to the electricity grid. The application utilizes two I-8120W modules plugged in one VP-25W1 in each subsystem. One is for obtaining the battery status, and another is for transmitting the data to the VP-6641-WES7. The VP-6641-WES7 controls the charge time using a breaker, stores data to local SQL data base and transmits the status information to the PC via the Ethernet for backup.



Machine Automation

Products: VP-6641-WES7, I-8092F, I-8094, I-8094F

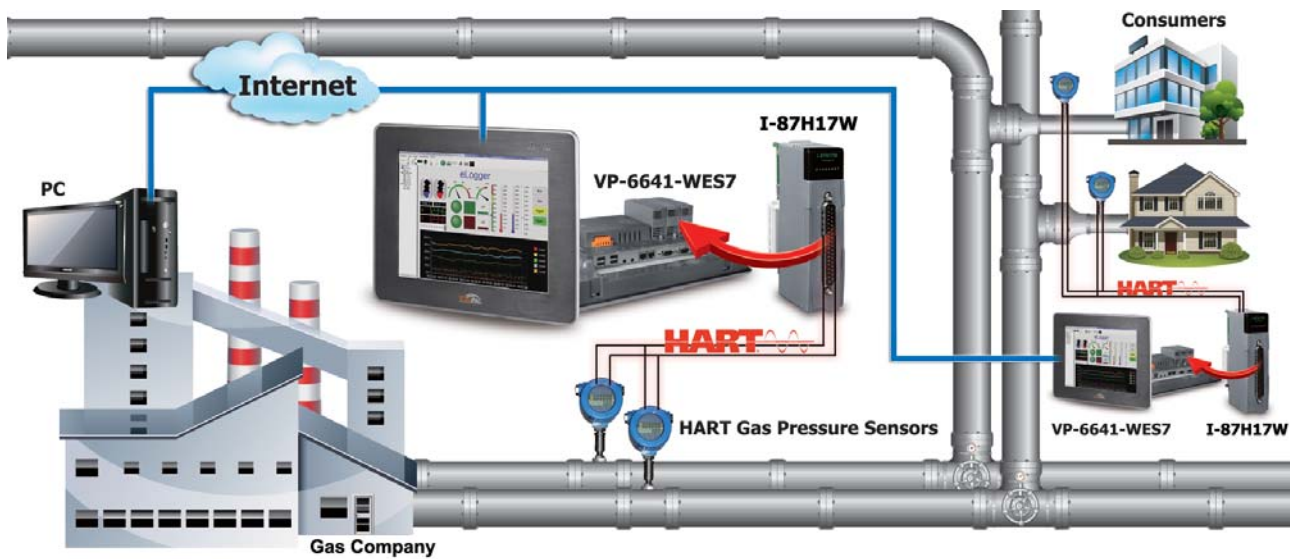
ICP DAS provides a wide range of motion solutions for machine automation systems, including PAC/ViewPAC, motion control modules and a various of development software such as VC, C# or VB .NET to apply to machine automation control systems. Furthermore, with a TFT color LCD, VP-6641-WES7 becomes a perfection product to integrate HMI, controller and motion control module into a single unit.



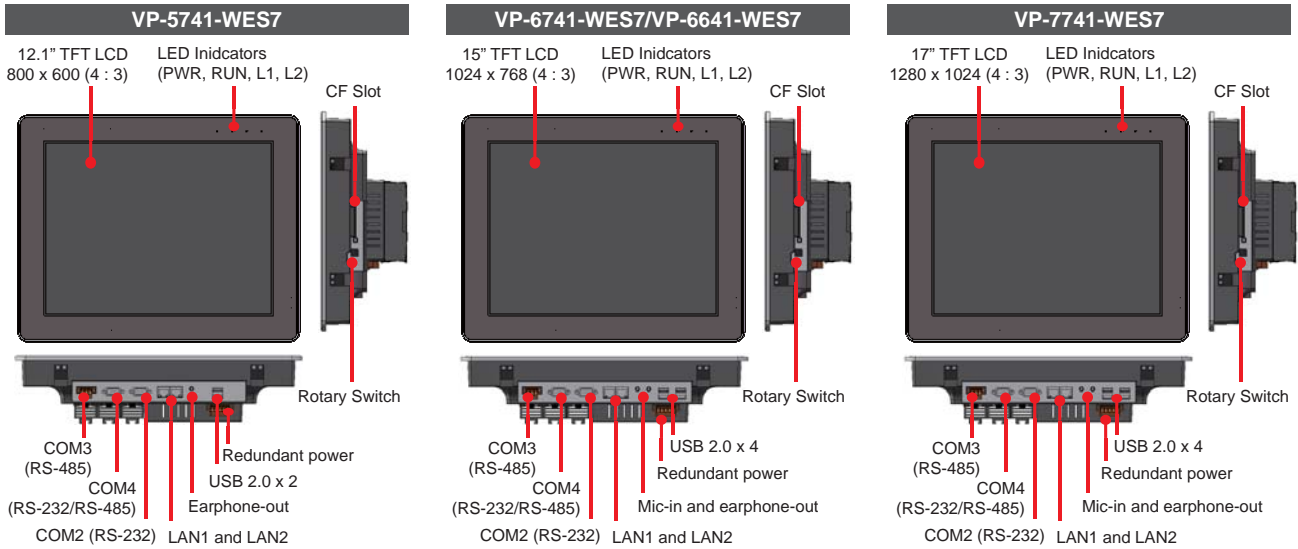
Pressure Detection of Gas Pipeline

Products: VP-6641-WES7, I-87H17W

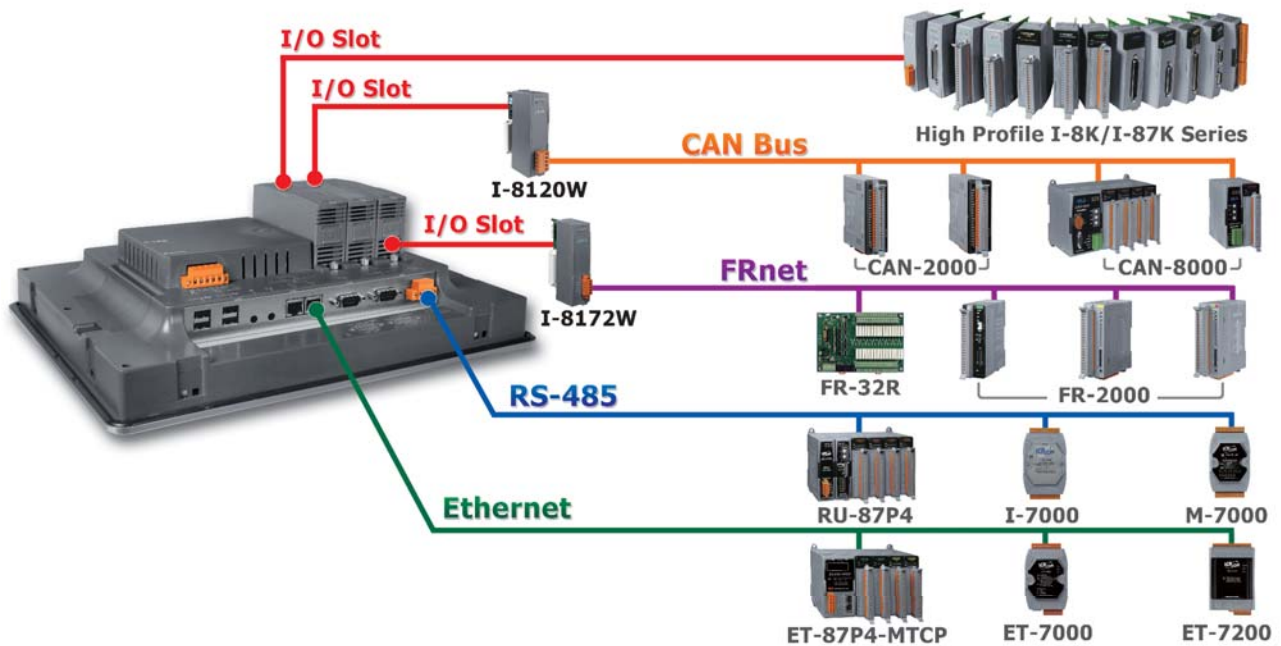
In general, the process of the natural gas transported to users' houses requires long-distance pipeline. The gas pressure in the pipeline will be reduced gradually from high to medium until low. If the gas pipeline ruptures and nobody knows it, it will cause the great loss of company. Further, it even causes the more serious disaster. So the most important mission for gas transportation system is strict control of the gas pipeline pressure. The gas company uses HART bus manometer for stable measurement and easy maintenance. The VP-6641-WES7 and I-87H17W with eight HART AI channels are used to collect these HART manometers data quickly and easily. Through Ethernet, the control center can monitor all gas pipeline pressure remotely.



Appearance



I/O Expansion



Ordering Information

| | |
|--------------|---|
| VP-6641-WES7 | 15" ViewPAC with Atom N2600 CPU and WES7 OS |
| VP-5741-WES7 | 12.1" ViewPAC with Atom E3827 CPU and WES7 OS |
| VP-6741-WES7 | 15" ViewPAC with Atom E3827 CPU and WES7 OS |
| VP-7741-WES7 | 17" ViewPAC with Atom E3827 CPU and WES7 OS |

Accessories

| | |
|--------------|---|
| 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-60-24 CR | 24 VDC/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS) |