

Valueline Industrial PC

A configurable industrial computer platform



AUTOMATION

Data Sheet
2643_en_C

© PHOENIX CONTACT - 2010-01

1 Description

The Valueline Industrial PC (VL IPC) product line is a configurable industrial computer platform. A VL IPC system can be custom configured from various display, CPU, memory and mass storage options, allowing greater flexibility in matching hardware to specific application requirements. The robust, modular design of the VL IPC product streamlines the manufacturing process resulting in faster product delivery times.

The Valueline Industrial PC can be integrated with other Phoenix Contact control and networking products to create a complete Phoenix Contact automation solution.

The targeted applications for the Valueline Industrial PC are:

- Machine and process control
- Monitoring and visualization
- Data acquisition
- Database retrieval and storage

2 Features

- Compact, rugged housing
- Flexible mounting options
- 15- and 17-in. touch screen display with or without USB port
- Removable hard drive, solid state hard drive and CompactFlash® data storage options
- Two RJ45 Ethernet ports (10/100/1000 Mbps)
- Up to 3 GB RAM
- Up to two CompactFlash slots
- Two optional slots allow installation of PCI cards for direct connection to fieldbus networks or other applications



NOTE:

Protective earth ground and circuit ground (return) are connected.



Make sure you always use the latest documentation. It can be downloaded at www.phoenixcontact.net/catalog.



This data sheet is valid for all products listed on the following page:

3 Ordering Data

Products

Description	Type	Order No.	Pcs./Pkt.
Industrial PC, configurable	VALUELINE IPC	2913108 ¹	1

¹ An order key must be appended to the 7-digit order number to reflect the various options that are specified in each configuration. The order key is generated using the Phoenix Contact on-line configuration tool.

Accessories

Description	Type	Order No.	Pcs./Pkt.
Power supply unit, primary switched-mode	TRIO-PS/1AC/24DC/2.5	2866268	1
Power supply unit, primary switched-mode	TRIO-PS/1AC/24DC/5	2866310	1
Power supply unit, primary switched-mode	TRIO-PS/1AC/24DC/10	2866323	1
Power supply unit, primary switched-mode	QUINT-PS/1AC/24DC/3.5	2866747	1
Power supply unit, primary switched-mode	QUINT-PS/1AC/24DC/5	2866750	1
Power supply unit, primary switched-mode	QUINT-PS/1AC/24DC/10	2866763	1

4 Technical Data

General Data

Dimensions (width x height x depth)	
VL IPC without PCI slots, no display	265 x 207x 49 mm
VL IPC with PCI slots, no display	265 x 207 x 76 mm
Display only, 15 in.	410 x 309 x 47 mm
Display only, 17 in.	452 x 356.5 x 50 mm
Ambient temperature (operating) ¹	5 ... 55°C
Ambient temperature (storage/transport)	-40... 70°C
Permissible humidity (relative)	5... 95%
Weight	
without PCI slots	3.40 kg
with PCI slots	5.35 kg
Display, 15 in.	3.40 kg
Display, 17 in.	5.85 kg
Degree of protection	IP65 (front), IP20 (back)
Mounting	Panel, bookshelf, and wall
LED indicators	Power, HDD, Run, Error

¹ Various configurations can affect the temperature rating. Refer to the user manual for more detail.

Electrical Data

Power supply, nominal	24 V DC
Power supply, range	19.2 - 28.8 V DC
Connection	Removable Combicon
Current draw, typical ¹	1.5 A
Current draw, maximum ²	5.2 A
Power consumption, typical	36.0 W
Power consumption, maximum	124.8 W
RTC battery, typical life	5 years

¹ Typical configuration - Celeron, 15-in. display, full memory, DVD, HDD, 2 x CompactFlash slots, one loaded USB slot. Tested running burn-in test.

² Maximum configuration - Core2 Duo, 17-in. display, full memory, DVD, HDD, 2 x CompactFlash slots, one loaded USB slot, loaded PCI slot. Tested running burn-in test

Computer Data

Operating system (configurable option)	Windows® XP
Processor (configurable option)	1.60 GHz Intel® Atom™ N270, 533FSB, 512 kB L2 Cache 1.01 GHz Intel® Celeron® M, 533FSB, 1 MB L2 Cache 1.5 GHz Intel Core2™ Duo, 667 FSB, 4 MB L2 Cache
RAM (configurable option)	512 kB to 3 GB
Data memory (configurable option)	2.5 in. SATA hard drive 2.5 in. SATA solid state drive CompactFlash®
Optical drive (configurable option)	CD-RW/DVD-RW
Number of CompactFlash® slots (configurable option)	2 maximum
Number of PCI slots (configurable option)	2 maximum
PCI card size (maximum)	168.0 x 98.4 mm
Maximum current draw per PCI slot	600 mA

Interfaces

USB	4x Type A, USB 1.1/2.0
Serial, RS-232 (configurable option)	DB-9, male
Video (configurable option)	VGA (DB-15, female) DVI-D
NVRAM connection	Mini-PCI (on-board)
NVRAM size (configurable option)	128 kB
Number of Ethernet connectors	2
Ethernet connection	10/100/1000 Mbps

Display - 17 in.

Screen size, diagonal	430 mm (16.93 in.)
Screen size, horizontal x vertical	337.92 x 270.34 mm
Resolution	1280 x 1024
Type	Resistive touch screen with serial/USB interface
Brightness	350 Cd/m ²
Number of colors	16.7 million
Contrast ratio	1000:1
View angle, horizontal/vertical (CR=10)	170°/160°
Installation cutout dimensions (width x height)	424.0 x 329.5 mm
Outside bezel dimensions (width x height x depth)	452.0 x 356.5 x 10 mm
Backlight life, minimum	50000 hr.
Interface (configurable option)	USB 1.1/2.0, Type A

Display - 15 in.

Screen size, diagonal	378 mm (14.88 in.)
Screen size, horizontal x vertical	304.13 x 228.10 mm
Resolution	1024 x 768
Type	Resistive touch screen with serial/USB interface
Brightness	350 Cd/m ²
Number of colors	16.7 million
Contrast ratio	700:1
View angle, horizontal/vertical (CR=10)	70°/65°
Installation cutout dimensions (width x height)	386.6 x 285.0 mm
Outside bezel dimensions (width x height x depth)	410 x 309 x 10 mm
Backlight life, minimum	50000 hr.
Interface (configurable option)	USB 1.1/2.0, Type A

Mechanical Tests

Shock test according to IEC 60068-2-27	15g, 11 ms impulse
Vibration resistance according to IEC 61131-2	Hard Drive: 0.5g CompactFlash: 1.0g

Conformance With EMC Directives

Developed according to IEC 61000-6-2

IEC 61000-4-2 (ESD)	Criterion B
IEC 61000-4-3 (radiated-noise immunity)	Criterion A
IEC 61000-4-4 (burst)	Criterion B
IEC 61000-4-5 (surge)	Criterion B
IEC 61000-4-6 (conducted noise immunity)	Criterion A
IEC 61000-4-8 (noise immunity against magnetic fields)	Criterion A
EN 55022 (noise emission)	Class A

Approvals

CE	
UL, cUL	UL 508
UL, cUL Class I, Division 2, Groups A, B, C, D ¹	UL 1604

¹ Displays with USB ports do not qualify with Class I, Division 2 listing