

FA-PC VPC Series VPC-3000



* Specifications, color and design of the products are subject to change without notice.

This product is a BTO industrial computer that is equipped with a CPU Intel® Core i7 4770S processor (3.10GHz), Core i5 4570S (2.9GHz) processor, or Celeron G1820 processor (2.7GHz). The Intel® Q87 chipset with DDR3 memory (4GB, 8GB, or 16GB) provides advanced computing and graphical performance. This product features a variety of interfaces such as 8 USB ports (front: 2, rear: 6), 2 1000BASE-T ports, 1 RS-232 port, and 1 parallel port. This unit is ideal for a wide range of embedded applications such as control devices and information terminals based on general-purpose PC operating systems.

This series provides carefree use under harsh working conditions such as FA, achieving superb environmental resistance and a long-term stable supply due to careful selection of parts such as an embedded CPU and chipset.

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Standard Model (Stock Model whose setup had finished)

			Drive		
Model	CPU	Memory	HDD	Optical Drive	OS
VPC-3000-27225B	Celeron G1820 2.7GHz				Windows 7 Professional 32bit
VPC-3000-37225B	Core i5-4570S 2.9GHz	4GB(4GBx1)DDR3 SDRAM	250GB SATA	DVD Super multi Windows 8.1 Industry	Japanese version
VPC-3000-47225B	Core 15-4570S 2.9GHZ				
VPC-3000-4721DB	Core i7-4770S 3.1GHz		HDDx1		Windows 8.1 Industry Pro 64bit Japanese version

BTO Custom Model (BTO Menu)

CIDIT	M	Drive			03
CPU	Memory	HDD1	HDD2	Optical Drive	OS
Core i7-4770S 3.1GHz	2GB (1GB x 2) DDR3 SDRAM	None	None		None
		250GB, SATA HDD	250GB, SATA HDD		Windows 10 IoT Enterprise 2015 LTSB Multi language version 64bit
	DDIG SDICAW	2TB, SATA HDD	2TB, SATA HDD		
Core i5-4570S 2.9GHz	8GB (4GB x 2) DDR3 SDRAM	250GB mirroring, software RAID 250GB x 2 SATA HDD			Windows 8.1 Industry Pro 64bit Japanese version
		2TB mirroring, software RAID 2TB x 2 SATA HDD		Super multi	Windows 7 Professional for Embedded
Celeron G1820 2.7GHz	16GB (4GB x 4) DDR3 SDRAM	Hot swap 250GB mirroring, hardware RAID 250GB x 2 SATA HDD			Systems 64bit Japanese version
		Hot swap 250GB mirroring, hardware RAID 2TB x 2 SATA HDD			Windows 7 Professional for Embedded Systems 32bit Japanese version
					Windows 7 Ultimate for Embedded Systems 32bit Multi language version

Features

Equipped with an Intel® Core i7 CPU(*Core i7 Model)

Embedding a high-performance CPU in the VPC-3000 series enables its low prices.

Uses the Intel® Q87 Chipset

Employing an embedded-style chipset with the VPC-3000 series enables its a long-term stable supply.

Supports mirroring(RAID1)

Mirroring enables the construction of redundant system. [Hardware RAID]

Selecting the optional mirror card enables the construction of hardware mirroring. Hot-swapping is also supported. [Software RAID]

Software mirroring can be constructed, but hot-swapping is not supported.

Uses a chassis suitable for embedded applications

Taking advantage of our rich experience, we have designed the VPC-3000 series with optimization for heat dissipation, dampening for operating vibrations, and consideration for scalability.

Supports high-speed high-capacity memory

The VPC-3000 series supports DDR3 SDRAM DIMM modules (4GB, 8GB or 16GB) designed for high transfer speed, flexibly addressing memory-consuming applications such as image processing.

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Functional Specification

System Specificatio	n .		
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- Intel Celeron G1820 2.7GHz		
CPU*1	- Intel Core i5 4570S 2.9GHz		
	- Intel Core i7 4770S 3.10GHz		
Chipset	Intel Q87		
BIOS	AMI BIOS		
	4096MB(4096MBx4),8192MB(4096MBx2),16384MB(4096MBx4)		
Memory*1	(DDR3 SDRAM DIMM)		
	- SATAIII 3.5"HDD 250GB/2TB		
Hard disk drive*1	(Software/Hardware)RAID1		
	- SATAIII 3.5"HDD 250GB/2TB x1 or x2		
Optical drive	DVD super multi drive		
Display	Digital, Analog combined use DVI-I 29pin, Display Port 20pin		
USB port	USB2.0 front 2port, Rear 2port, USB3.0 rear 4port		
PS/2 port	2 port (Keyboard/Mouse combo type)		
Audio	Realtek ALC892 High Definition		
Addio	(Mic-in, Line-in, Line-out)		
Serial*2	COM1,2,3,4 (RS-232C) *2 D-SUB 9pinx4		
Parallel	D-SUB 25pinx1		
LAN port	100BASE-TX/1000BASE-T RJ45 x 2		
LAN Controller	Intel I218-LM GbE Ethernet Controller(LAN1)		
Er ii V Goriti olici	Intel I210-AT GbE Ethernet Controller (LAN2)		
Digital I/O	Front : LED output x2 Rear : output x2, Input x4		
3 *** * *	(Software API support, User application available)		
	WDT: 1 sec - 255sec(Resetting operation by time up)		
RAS function	Remote reset/Remote power on External input signal Software RAS function		
	(FAN rotation, temperature, Voltage data reading)		
	PCI Express x16 (Max:176mm(L)x110mm(H)) : 1slot		
Extended slot	PCI Express x1 (Max:176mm(L)x110mm(H)) : 1slot		
Exteriada diot	PCI (Max:176mm(L)x110mm(H)) : 2slot		
	- Windows 7 Professional (32bit) JPN		
	- Windows 7 Professional (64bit) JPN		
OS*1	- Windows 7 Ultimate (32bit) [ENU/JPN/CHS]		
	- Windows 8.1 Industry (64bit) JPN		
	- Windows $10\ \mathrm{IoT}$ Enterprise 2015 LTSB Multi language version 64bit		
Stand	Wall mount		
Physical			
dimensions(mm)/	370(W) x 470(D) x 166(H)(No protrusions)/About 14kg*3		
Weight			
Power	400W ATX Power(100-240VAC(50-60Hz) Automatic input switch)		
Certification	RoHS,CE,FCC,VCCI		

- Implement and install the options you selected.
- The connector of the D-SUB 9 pin is output from the back of the chassis. Only the weight of the main unit. Appended goods and the packing box are excluded.

Ambient Specification

Item		Specification		
Operating temperature/humidity		5 - 40°C/20 - 80%RH(No condensation)		
Storage temperature/humidity		-20°C - 60°C/5 - 80%RH(No condensation)		
Floating dust particles/ Corrosive gases		Not to be excessive/None		
Line-noise resistance	Static electricity resistance	Contact discharge		
	Line noise	AC line/2KV,Signal line/1KV (EN61000-4-4Level3,IEC1000-4-4Level3)		
Vibration resistance	Sweep resistance	10 - 57Hz/semi-amplitude 0.015m 57 - 150Hz/0.2G 40 min each X,Y, and Z directions (JIS C0040 compliant, IEC68-2-6 compliant)		
Impact resistance		10G, half-sine shock for 11 ms in X,Y, and Z directions (JIS C0041 compliant, IEC68-2-27 compliant)		
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(Note) Do not use under environmental conditions beyond normal specifications. The system may malfunction.

Option Mirror card specification

Item	Specification	
Number of connected drivers	2	
RAID level	1	
Storage capacity	Max. 2TB	
Cache memory size	1MB	
Host interface	S-ATA Max. data transfer rate : 3Gbps	
Drive interface	S-ATA Max. data transfer rate : 3Gbps	
Range of power-supply voltage	4.75VDC - 5.25VDC	
Current consumption	1.1A – 1.5A	
Physical dimensions (L x W)	96mm x 98.2mm	
Weight	49g (max.)	

Supported OS

Windows 7 Professional for Embedded System (JPN) 32bit Windows 7 Professional for Embedded System (JPN) 64bit

Windows 8.1 Industry Pro (JPN) 64bit

Windows 7 Ultimate for Embedded System (ENU/JPN/CHS)

Windows 10 IoT Enterprise 2015 LTSB Multi language version (ENU/JPN/CHS/KOR) 64bit

Packing List

Setup-PC...1

Wall Mount Stand ...2

AC Cable (125V spec) ...1

I/O Terminal Connector ...2

Warranty Certificate ...1

VPC-3000 Product guide / Precaution List...1

Serial Number Label...1

DVI Connector ...1

Name Plate ... 1

Rubber Foot...1

Recovery Media / Driver Disc...1set *1

Truss head screw M3 x 5*2

Truss head screw M4 x 6^{*2}

Flat head screw #6-34 x 4*2

Flat head screw M3 x 4*2

Clamp...1set *2

On-site Maintenance Service Pack*3

Mouse*3

Keyboard *3

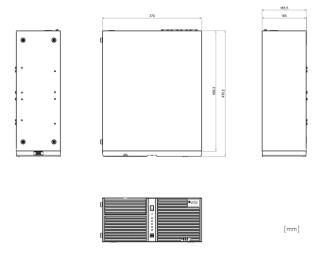
- A recovery disk set is included with the OS installed model. A driver disk is included with the model that does not have an OS.
- The quantity varies depending on the product configuration. This is included when it is selected as an option.

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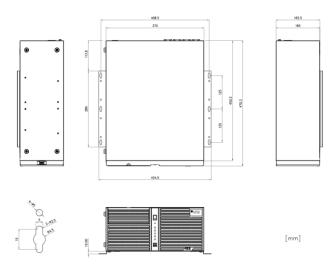


Physical Dimensions

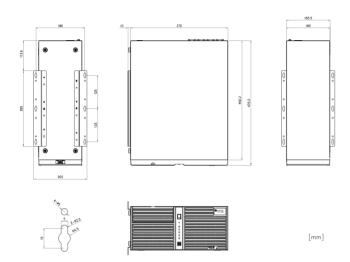
VPC-3000



At installation the wall mount stand of VPC-3000 (horizontal installation)



At installation the wall mount stand of VPC-3000 (Vertical installation)



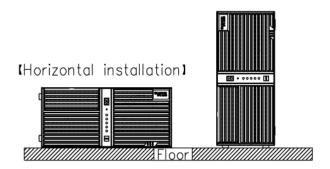
Installation Requirements

In order to enjoy reliable use of the VPC-3000 series, maintain the following conditions.

Installable directions

Please do not use by the following installations, and do not set it up in other directions.

[Vertical installation]

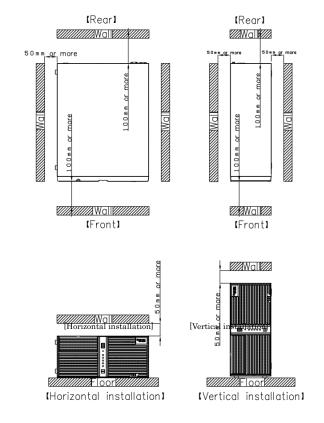


Space between the main unit and its surroundings

The main unit of the VPC-3000 series is equipped with air vents and fans for regulating temperature. In order to ensure space for air vents and cables, keep distance described in the following between the front/rear and surrounding equipment, walls, etc.

Note that in the installation location, air must be able to circulate. Please adjust the flow of air so as not to exceed the specification temperature of the product.

Moreover, the unit cannot be used in an enclosed space.



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Difference from VPC-2000

	VPC-3000	VPC-2000
Display	DVI-I x1 *	DVI-D x1
	Displayport x1	VGA x1
USB	USB3.0 x4(rear x4)	USB2.0 x6(rear x4,front x2)
	USB2.0 x4(rear x2,front x2)	
Storage	3.5"SATA,2.5"SATA	3.5"SATA
CMOS Power	On the Mother Board	Front
	CR2032	RB-2/3A
OS(WinXP)	Not supported	Supported

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^{*} The VPC-3000 series doesn't have VGA ports.
Please convert DVI to VGA using the attached conversion connector.