

FA-PC
VPC Series
VPC-1800 Series



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

Features

- **Compatible with Intel® Core™ processor series Raptor Lake**
The product is equipped with the 12th-generation Intel® Celeron processor and 13th-generation Intel® Core™ processor and greatly realizes lower-power consumption while ensuring fine performance of operation tasks and drawing. Adopting embedded-type CPU contributes to a stable supply.
- **High-performance graphics with CPU embedded type**
Full HD video can be smoothly played with the Intel® UHD Graphics 770/730/710. It also supports full HD output of the three-screen with the DVI-I, DisplayPort and HDMI.
- **Mirroring (RAID1) supported**
Mirroring (hardware option) can be configured to suit the application and ensure the system to be redundant.
- **Removable storage adopted**
The product adopts front accessible 3.5-inch SATA storage, and also supports RAID function such as mirroring.
- **Rich variety of interfaces to expand your peripherals freely**
Interfaces including DVI-I, HDMI, DisplayPort, 2.5GBASE-T x2, 1000BASE-T x1 or 2, USB 3.2 Gen2(USB 3.1) x4, USB 3.2 Gen1 (USB 3.0) x4, serial port (RS-232C/RS-422A/RS-485 x1, RS-232C x3), and audio are provided.
- **The selection of expansion slots from PCI-Express 3.0(x1) or PCI board**
Expansion slots can be selected from PCI slots x3, or PCI-Express 3.0(x1) slot x1 and PCI slots x2. The maximum installable board dimensions are 176 (L) x 106 (H) mm [for PCI], 176 (L) x 112 (H) mm [for PCI-Express].
- **The identical dimensions enable easy replacement with the VPC-1700 series**
In order to replace the system with ease, this product has the same physical dimensions as the VPC-1700 series.

Supported OS

- Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese / English / Chinese / Korean)
- Windows 11 IoT Enterprise LTSC 2024 (Japanese / English / Chinese / Korean)

This product is a BTO industrial computer that is equipped with an 12th generation Intel® Celeron processor and 13th generation Intel® Core™ processor series.

The Intel® Q670 chipset with DDR5 memory (16GB - 128GB) provides advanced computing and graphical performance.

This product features a variety of interfaces such as one each port of DVI-I, HDMI, DisplayPort, four USB 3.2 Gen2 (USB 3.1) ports (rear:4), four USB 3.2 Gen1 ports (front:2, rear:2), four serial ports (RS-232C/422A/485 x1, RS-232C x3), two 2.5GBASE-T and one to two 1000BASE-T ports, which can be used in a wide range of embedded applications such as general-purpose PC OS-based controllers and information terminals.

Two types of expansion slots are provided: PCI slots x3, or PCI-Express 3.0(x1) slot x1 and PCI slots x2.

- * The contents in this document are subject to change without notice.
- * Visit the CONTEC website to check the latest details in the document.
- * The information in the data sheets is as of February, 2026.

Specifications

Function specification < 1 / 2 >

Item	Description
CPU [Selection]	Intel® Celeron® Processor G6900TE 2.4GHz / 35W Intel® Core™ i3-13100TE Processor 4.1GHz(Max.)/35W Intel® Core™ i5-13500TE Processor 4.5GHz(Max.)/35W Intel® Core™ i7-13700TE Processor 4.8GHz(Max.)/35W
Chip set	Intel® Q670
BIOS	BIOS (mfd. by AMI)
Memory [Selection]	Max 128GB, U-DIMM Socket x4, DDR5 SDRAM 16GB: 16GB DDR5 U-DIMM x1 32GB: 16GB DDR5 U-DIMM x2 64GB: 16GB DDR5 U-DIMM x4 128GB: 32GB DDR5 U-DIMM x4
Graphic	
Controller	Intel® UHD Graphics 710 (Celeron® type) Intel® UHD Graphics 730 (Core™ i3 type) Intel® UHD Graphics 770 (Core™ i5, Core™ i7 type)
System resolution	HDMI 4096 x 2160 @60Hz Max
	Display Port 4096 x 2160 @60Hz Max
	DVI-I 1920 x 1200 @60Hz Max
Storage [Selection] *2	- Removable drive, SATAIII 3.5-inch x2 SATAIII 3.5-inch HDD 2TB (Max. 2pcs) SATAIII 3.5-inch HDD 4TB (Max. 2pcs) SATAIII 2.5-inch SSD 256GB (Max. 2pcs) SATAIII 2.5-inch SSD 512GB (Max. 2pcs) SATAIII 2.5-inch SSD 1TB (Max. 2pcs) SATAIII 2.5-inch SSD 2TB (Max. 2pcs) Hardware RAID (Mirroring) / Software RAID (Mirroring) - M.2 slot x1 NVMe 2280 SSD 256GB (Max. 1pc) NVMe 2280 SSD 512GB (Max. 1pcs) NVMe 2280 SSD 1TB (Max. 1pcs) NVMe 2280 SSD 2TB (Max. 1pcs)
Optical drive [Selection]	DVD Super Multi drive
Interface	Display DVI-I x1, HDMI x1, DisplayPort x1, Supports three displays
	USB A-TYPE connector Front: USB3.2 Gen1(USB3.0) x2, Inside: USB2.0 x2, Rear: USB3.2 Gen2(USB3.1) x4, USB3.2 Gen1(USB3.0) x2
	Audio HD Audio compliant, 3.5p stereo mini jack, LINE OUT x1, LINE IN x1, MIC IN x1
	Serial 9-pin D-SUB connector(male) x4 (RS-232C/422A/485 x1, RS-232C x3) Baud rate: 50 - 115,200bps
	LAN 3 ports (RJ-45 connector) LAN A: 1000BASE-T/100BASE-TX/10BASE-T, Wake On LAN LAN B/C: 2500BASE-T/1000BASE-T/100BASE-TX/10BASE-T, Wake On LAN
	Digital I/O Front: LED outputs x2, Rear: outputs x2, inputs x4
POST	BIOS POST code display 7-segment LED

Function specification < 2 / 2 >

Item	Description
LAN port expansion [Selection]	1000BASE-T/100BASE-TX/10BASE-T *Not available when 3PCI slots are selected, *Mounted in Expansion slot A slot
Expansion slot [Selection]	- PCI slot x 3 *Not available when LAN board is added. - PCI Express 3.0(x1) slot x 1, PCI slot x 2 * Only PCI slot is available when LAN board is added. Usable board dimension PCI : Max. 176mm(L) x 107mm(H) PCI Express : Max. 176mm(L) x 112mm(H)
Security (TPM)	TCG TPM2.0
Hardware monitoring	Monitoring CPU temperature, card temperature, fan speed and power voltage
RTC/CMOS	Lithium backup battery life : 7 years or longer The real-time clock is accurate within ± 3 minutes (at 25°C) per month,
Power Management	Power management setup via BIOS, Power On by Ring / Wake On LAN
Watch Dog Timer	Software programmable, 255 level (1sec - 255 sec). Causes a reset upon time-out.
Supportable OS [Selection]	None Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese / English / Chinese / Korean) Windows 11 IoT Enterprise LTSC 2024 (Japanese / English / Chinese / Korean)
Power supply	250W FlexATX power supply (50/60Hz Input auto switching)
Rated input voltage	100 - 240VAC
Range of input voltage	90 - 264VAC
Power consumption	100 - 240VAC, 2.4 - 1.0A(Max)
External device power supply capacity	- Without expansion slots: USB I/F + 5V: Total 5.6A - PCI slot x 3: USB I/F + 5V: 5.6A PCI 3-slot total +3.3V: 3A, +5V: 6A, +12V: 1.5A PCI capacity per slot +3.3V: 2A, +5V: 2A, +12V: 0.5A - PCI-Express 3.0(x1) slot x 1, PCI slot x 2: USB I/F + 5V: Total 5.6A 3-slot total +3.3V: 3A, +5V: 6A, +12V: 1.5A PCI capacity per slot +3.3V: 2A, +5V: 2A, +12V: 0.5A PCI-Express 3.0(x1) capacity per slot +3.3V: 3A, +12V: 0.5A
Physical dimensions (mm)	115(W) x 410(D) x 310(H) (No protrusions)
Weight *1	About 8.0kg (Excluding attachment fittings)

*1 The weight (which does not include accessories) may vary depending on the product configuration.

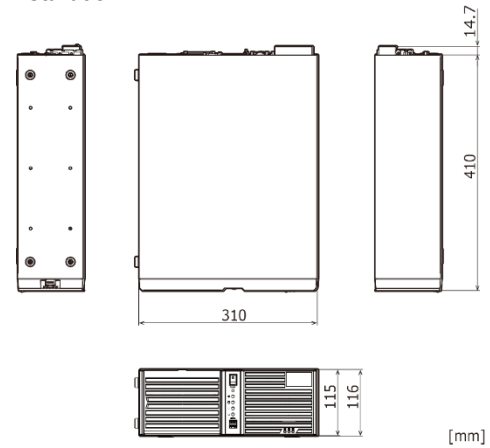
*2 If you select NVMe SSD, the selected OS is installed on the NVMe SSD.

Environment Requirements

Item	Description
Operating ambient temperature	5 - 40°C
Non-operating ambient temperature	-20 - +60°C
Operating ambient humidity	20 - 80%RH (No condensation)
Non-operating ambient humidity	20 - 80%RH (No condensation)
Floating dust particles	Not to be excessive
Corrosive gases	None
Line-noise resistance	Line noise AC line : ± 2 kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3) Signal line : ± 1 kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3) Static electricity resistance Contact discharge / ± 4 kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Atmospheric discharge / ± 8 kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Vibration resistance	Sweep resistance - HDD configuration (when powered on) 10 - 50Hz/0.5G 25 min. each in x, y, and z directions (JIS C60068-2-6 compliant, IEC60068-2-6 compliant) - SSD configuration (when powered on) 10 - 57Hz/semi-amplitude: 0.075mm, 57 - 150Hz/1.0G 40 min. each in x, y, and z directions (JIS C60068-2-6 compliant, IEC60068-2-6 compliant)
Shock resistance	10G, half-sine shock for 11 ms in x, y, and z directions (JIS C60068-2-27-compliant, IEC60068-2-27-compliant)
Grounding	Class D grounding, SG-PG / continuity
Standard	VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, Low Voltage Directive, RoHS Directive), UKCA,

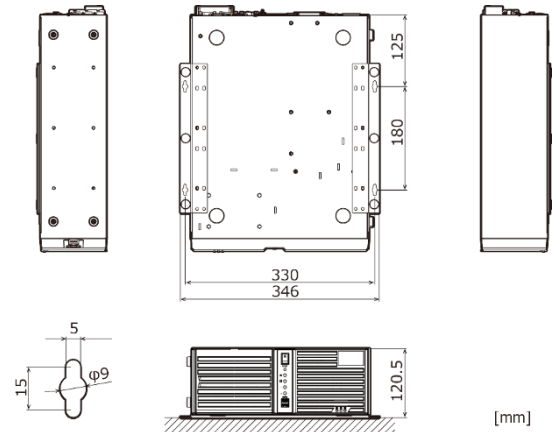
Physical Dimensions

Horizontal Installation

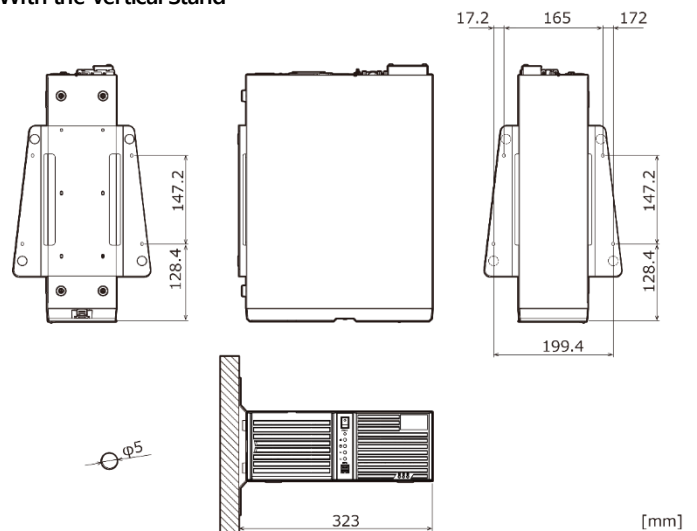


* 116mm is the height including the protrusion for attaching rubber feet

With the Brackets for Horizontal Orientation



With the Vertical Stand



Included Items

Product ...1
 Bracket for Horizontal Orientation...2
 Vertical Stand...1 *1
 AC Cable (125VAC, 3-P type)...1
 DVI-Analog RGB Conversion Adapter...1
 I/O Terminal Connector...2
 Cable Tie...8
 Rubber Foot...4
 Countersunk Screw (#6-32 x 5)...1 set
 Pan-Head Screw (M3 x 6)...6
 Truss-Head Screw (M4 x 6)...12
 Keyboard...1 *1
 Mouse...1 *1
 Product Guide ... 1

*1 This may not be included depending on the product configuration.

Replacement Parts for Maintenance

Parts name	Type	Description
Hard disk	HDD-2TS-3	2.5 inch SATA HDD 2TB
	HDD-2TS-3R	2.5 inch SATA HDD 2TB (RAID support)
	HDD-4TS-3	3.5 inch SATA HDD 4TB
	HDD-4TS-3R	3.5 inch SATA HDD 4TB (RAID support)
	SSD-256GS-2T	2.5 inch SATA SSD 256GB
	SSD-256GS-2TR	2.5 inch SATA SSD 256GB (RAID support)
	SSD-512GS-2T	2.5 inch SATA SSD 512GB
	SSD-512GS-2TR	2.5 inch SATA SSD 512GB (RAID support)
	SSD-1TS-2T	2.5 inch SATA SSD 1TB
	SSD-1TS-2TR	2.5 inch SATA SSD 1TB (RAID support)
Fan	VPC-1600-FAN	Front chassis fan
Fan Filter	VPC-1600-FILTER	Front fan filter

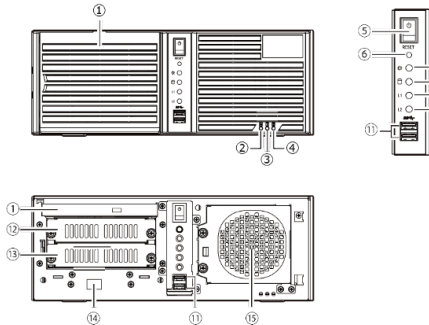
CAUTION

If a product other than our replacement parts one is used, the normal operation may be impaired or the functions may be limited.

Visit the CONTEC website for the latest replacement parts for maintenance.

Component Name

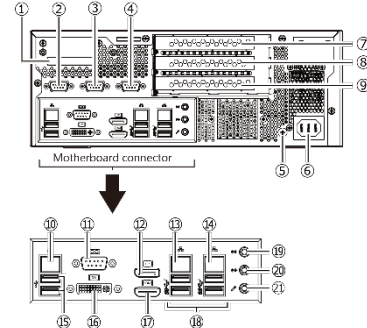
Front View



No.	Name	Function
1	Optical drive [selection]	DVD super multi drive
2	Access LED	LED status indicator when hardware RAID is selected.
3	Drive 1 LED	SATA device 1 access LED when hardware RAID is selected.
4	Drive 2 LED	SATA device 2 access LED when hardware RAID is selected.
5	POWER SW	Power switch
6	RESET SW	System reset switch
7	POWER LED	Power LED
8	HDD LED	SATA device LED
9	USER LED 1	User LED 1 (This LED can light up with the hardware RAID monitoring tool or by command of your software.)
10	USER LED 2	User LED 2 (This LED can light up with the hardware RAID monitoring tool or by command of your software.)

No.	Name	Function
11	USB3.0	USB 3.2 Gen1(USB 3.0) (Type-A connector) 2 ports
12	Removable drive 1	SATAIII, 2.5 inch / 3.5 inch removable drive 1
13	Removable drive 2	SATAIII, 2.5 inch / 3.5 inch removable drive 2
14	BIOS POST LED	BIOS POST code display
15	Cooling fan	Cooling fan for air intake

Rear View



No.	Name	Function
1	JDI01, JDI02	Digital I/O (Input x 4, output x 2)
2	COM B	RS-232C (9pin D-SUB Connector (male)) 1ports
3	COM C	RS-232C (9pin D-SUB Connector (male)) 1ports
4	COM D	RS-232C (9pin D-SUB Connector (male)) 1ports
5	FG	Terminal for frame ground
6	AC INLET	AC100 - 240V power input connector
7	Expansion slot A [selection]	PCI slot x 1 or PCI Express 3.0(x1) slot x 1
8	Expansion slot B [selection]	PCI slot x 1
9	Expansion slot C [selection]	PCI slot x 1
10	LAN A	1000BASE-T/100BASE-TX/10BASE-T (RJ-45 Connector) 1219LMt Ethernet x 1
11	COM A	RS-232C/RS-422A/RS-485 (9pin D-SUB Connector (male)) 1 port
12	DisplayPort	DisplayPort x 1 (20pin, female)
13	LAN B	1000BASE-T/100BASE-TX/10BASE-T (RJ-45 Connector) 1225 Ethernet
14	LAN C	1000BASE-T/100BASE-TX/10BASE-T (RJ-45 Connector) 1225 Ethernet
15	USB3.2 Gen1	USB 3.2 Gen1(USB 3.0) (Type-A Connector) x 2
16	DVI-I	DVI-I x 1 (25pin, female)
17	HDMI	HDMI x 1 (19pin, female)
18	USB3.2 Gen2	USB 3.2 Gen2(USB 3.1) (Type-A Connector) x 4
19	LINE IN	Line input (3.5Φ PHONE JACK)
20	LINE OUT	Line output (3.5Φ PHONE JACK)
21	MIC INPUT	Mic input (3.5Φ PHONE JACK)

Commodity Model

VPC-1800 Type Rule

Model Name	V18J														
Type Name	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

No.	Item	Type Name	Description															
1	Chassis cooling fan	0	Standard															
		1	Made in SANYO DENKI															
2	Power supply	S	Standard Specifications (250W)															
3	CPU	1	Intel® Celeron® Processor G6900TE 2.4GHz / 35W															
		2	Intel® Core™ i3-13100TE Processor 2.4GHz 4.1GHz(Max.) /35W															
		3	Intel® Core™ i5-13500TE Processor 1.3GHz 4.5GHz(Max.) /35W															
		4	Intel® Core™ i7-13700TE Processor 1.1GHz 4.8GHz(Max.) /35W															
4	Memory	2	DDR5 U-DIMM 16GB (16GB x 1)															
		3	DDR5 U-DIMM 32GB (16GB x 2)															
		4	DDR5 U-DIMM 64GB (16GB x 4)															
		5	DDR5 U-DIMM 128GB (32GB x 4)															
5	M.2 (NVMe) *1	0	None															
		B	NVMe SSD (3D TLC) 256GB															
		C	NVMe SSD (3D TLC) 512GB															
		D	NVMe SSD (3D TLC) 1TB															
		E	NVMe SSD (3D TLC) 2TB															
6	Storage (Removable drive 1)	0	None															
		1	3.5inch HDD 2TB															
		2	3.5inch HDD 4TB															
		B	2.5inch SSD (3D TLC) 256GB															
		C	2.5inch SSD (3D TLC) 512GB															
		D	2.5inch SSD (3D TLC) 1TB															
		E	2.5inch SSD (3D TLC) 2TB															
7	Storage (Removable drive 2)	0	None															
		1	3.5inch HDD 2TB															
		2	3.5inch HDD 4TB															
		B	2.5inch SSD (3D TLC) 256GB															
		C	2.5inch SSD (3D TLC) 512GB															
		D	2.5inch SSD (3D TLC) 1TB															
		E	2.5inch SSD (3D TLC) 2TB															
8	Optical drive	0	None															
		1	DVD Super Multi drive															
9	RAID (Removable drive)	0	None															
		H	Hardware RAID (Mirroring)															
10	OS	0	None															
		1	Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese / English / Chinese / Korean)															
		3	Windows 11 IoT Enterprise LTSC 2024 (Japanese / English / Chinese / Korean)															
11	Expansion	0	None															
		1	Expansion slots..PCI bus : 3 slots Not available when LAN board is added.															
		2	E Expansion slots..PCI-Express 3.0(x1) : 1 slot, PCI bus : 2 slots Only PCI slot is available when LAN board is added.															
12	Additional Standards, AC cable (Included Items), Kitting	-	<table><tr><td></td><td>Common standard</td><td>Additional Standards</td><td>Cable</td><td>Kitting</td></tr><tr><td>0</td><td>VCCI, CE, FCC, UKCA</td><td>No</td><td>PSE</td><td>No</td></tr><tr><td>A</td><td>VCCI, CE, FCC, UKCA</td><td>No</td><td>PSE</td><td>LAN 1port(RJ45)</td></tr></table>		Common standard	Additional Standards	Cable	Kitting	0	VCCI, CE, FCC, UKCA	No	PSE	No	A	VCCI, CE, FCC, UKCA	No	PSE	LAN 1port(RJ45)
	Common standard	Additional Standards	Cable	Kitting														
0	VCCI, CE, FCC, UKCA	No	PSE	No														
A	VCCI, CE, FCC, UKCA	No	PSE	LAN 1port(RJ45)														
13	Installation stand/bracket	-	W..Bracket for Horizontal Orientation S..Bracket for Horizontal Orientation and Vertical Stand															

No.	Item	Type Name	Description																																																		
14	Keyboard & Mouse (Included Items)	-	Mouse : "USB I/F optical mouse " KB(JP) : "USB I/F keyboard (JP109)" KB(US) : "USB I/F keyboard (US104)" <table><tr><th></th><th>Bit3 Color*</th><th>Bit2 KB(US)</th><th>Bit1 KB(JP)</th><th>Bit0 mouse</th></tr><tr><td>0</td><td>-</td><td>No</td><td>No</td><td>No</td></tr><tr><td>1</td><td>white</td><td>No</td><td>No</td><td>Yes</td></tr><tr><td>2</td><td>white</td><td>No</td><td>Yes</td><td>No</td></tr><tr><td>3</td><td>white</td><td>No</td><td>Yes</td><td>Yes</td></tr><tr><td>9</td><td>black</td><td>No</td><td>No</td><td>Yes</td></tr><tr><td>A</td><td>black</td><td>No</td><td>Yes</td><td>No</td></tr><tr><td>B</td><td>black</td><td>No</td><td>Yes</td><td>Yes</td></tr><tr><td>C</td><td>black</td><td>Yes</td><td>No</td><td>No</td></tr><tr><td>D</td><td>black</td><td>Yes</td><td>No</td><td>Yes</td></tr></table> *Keyboard and mouse are the same color		Bit3 Color*	Bit2 KB(US)	Bit1 KB(JP)	Bit0 mouse	0	-	No	No	No	1	white	No	No	Yes	2	white	No	Yes	No	3	white	No	Yes	Yes	9	black	No	No	Yes	A	black	No	Yes	No	B	black	No	Yes	Yes	C	black	Yes	No	No	D	black	Yes	No	Yes
	Bit3 Color*	Bit2 KB(US)	Bit1 KB(JP)	Bit0 mouse																																																	
0	-	No	No	No																																																	
1	white	No	No	Yes																																																	
2	white	No	Yes	No																																																	
3	white	No	Yes	Yes																																																	
9	black	No	No	Yes																																																	
A	black	No	Yes	No																																																	
B	black	No	Yes	Yes																																																	
C	black	Yes	No	No																																																	
D	black	Yes	No	Yes																																																	
15	Reserve	0	Fixing																																																		

*1 If you select NVMe SSD, the selected OS is installed on the NVMe SSD.