

SIMATIC IPC647D (Rack PC, 19", 2 HU); 2x Gbit Ethernet (IE/PN), RJ45; 1x DVI-I; 2x display ports; 1x COM 1; 2x PS/2; audio; 4x USB 3.0, incl. 1x internal; 3x USB 2.0; Temp. and fan monitoring; Watchdog, Card retainer Core i5-4570TE (2C/4T, 2.7 (3.3) GHz, 4 MB cache, TB, VT-D, AMT); mainboard without fieldbus RAID1, 1 TB (2x 1 TB HDD SATA, mirror disks), internal 0.5 g vibration, 5 G shock 4 GB DDR3 SD-RAM (2x 2 GB), Dual channel bus module 4 slots: 2x PCI, 2x PCIE X16; DVD +/-RW (SLIM) without expansion (HW); Graphics onboard without operating system SIMATIC PC DiagMonitor V5.0 enclosed 110/240V industrial power supply unit; with NAMUR, Power supply cable Europe

General information	
Product type designation	IPC647D
Installation type/mounting	
Mounting	For horizontal installation; prepared for telescopic rails; 19" mounting bracket can be removed externally
Design	Rack PC, 19", 2U
Supply voltage	
Type of supply voltage	100/240 V AC (autorange) 50 / 60 Hz; optional redundant 100/240 V AC
Line frequency	
<ul style="list-style-type: none"> Rated value 50 Hz Rated value 60 Hz 	Yes Yes
Mains buffering	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	20 ms
Processor	
Processor type	Xeon E3-1268L v3 (4C/8T, 2.3 (3.3) GHz, 8 MB cache); Core i5-4570TE (2C/4T, 2.7 (3.3) GHz, 4 MB cache); Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB cache)
Chipset	Intel DH82C226 PCH
Graphic	
Graphics controller	Onboard graphics controller Intel HD 4600 Graphics integrated into the processor / PCI-Express graphics card (Dual Head: 2x VGA or 2x DVI-D) in the PCIe (x16) slot (optional)
Drives	
Optical drives	DVD±R/RW (SlimLine)
Hard disk	500 GB HDD, 1 TB HDD, 2x 1 TB HDD, RAID1 (2x 1 TB HDD, mirror disks); RAID1 (2x 1 TB HDD SAS, mirror disks) with PCIe (x8) RAID controller incl. ZMCP module
SSD	Yes; 240 GB SSD; RAID1 (2x 240 GB SSD, mirror disks)
Slot for drives	Mounted internally on the fixed hard disk support, or mounted internally in vibration/shock-absorbing hard disk support, or mounted at the front in the low-profile removable drive bay (hot-swap in RAID configurations)
Memory	
Main memory	2 GB to 32 GB DDR3-1600 DIMM, ECC optional
Capacity of main memory, max.	32 Gbyte
Interfaces	
Interfaces/bus type	1x COM1, 1x COM2 (optional), 1x LPT (optional), 2x DisplayPort, 1x DVI-I, 2x PS/2, audio (Microphone In, Line Out), 7x USB, 2x Gigabit Ethernet, PROFIBUS or PROFINET optional
serial interface	COM1: 1x RS 232, COM2 (optional): 1x RS 232
Video interfaces	
<ul style="list-style-type: none"> Graphics interface 	2x DisplayPort and 1x DVI-I onboard; 1x VGA via DVI-VGA adapter cable (optional); graphics card PCIe (x16), Dual Head (2x VGA or 2x DVI-D), 1 GB graphics memory (optional)
Industrial Ethernet	
<ul style="list-style-type: none"> Industrial Ethernet interface <ul style="list-style-type: none"> — 100 Mbps — 1000 Mbps 	Yes Yes
Interrupts/diagnostics/status information	

LED status display	POWER, HDD, ETHERNET 1, ETHERNET 2, PROFIBUS / MPI, SF PROFINET, WATCHDOG, TEMP, FAN, HDD0 ALARM, HDD1 ALARM
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Integrated Functions

Monitoring functions	
• Temperature monitoring	Yes
• Fan	Yes
• Monitoring function via network	Optional

Degree and class of protection

IP (at the front)	IP41
IP (rear)	IP20

Standards, approvals, certificates

CE mark	Yes; For use in industrial areas as well as domestic, business and commercial environments (emitted interference: EN 61000-6-3:2007 +A1:2011, noise immunity: EN 61000-6-2:2005)
CSA approval	Yes; Included in cULus
UL approval	Yes
cULus	Yes; UL 60950-1, file number E115352
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Dust protection	With front door closed: G2 EN 779, 99% of particles > 0.5 mm are filtered

Marine approval

• Germanischer Lloyd (GL)	Yes; Only with SSD
• American Bureau of Shipping (ABS)	Yes; Only with SSD
• Bureau Veritas (BV)	Yes; Only with SSD
• Det Norske Veritas (DNV)	Yes; Only with SSD
• Lloyds Register of Shipping (LRS)	Yes; Only with SSD

Ambient conditions

Ambient temperature during operation	
• min.	0 °C
• max.	50 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C

Vibrations

• Vibration resistance during operation acc. to IEC 60068-2-6	Tested according to IEC 60068-2-6: 10 cycles, 10 Hz to 58 Hz: 0.0375 mm, 58 Hz to 500 Hz: 4.9 m/s ² (0.5 g)
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Operating systems

pre-installed operating system	Windows 7 Ultimate, multi-language (32-bit/64-bit), Windows 10 Enterprise 2015 LTSB, multi-language (64-bit), Windows 10 Enterprise 2016 LTSB, multi-language (64-bit), Windows Server 2008 R2 Standard Edition incl. 5 clients, multi-language (64-bit); Windows Server 2012 R2 Standard Edition incl. 5 clients, multi-language (64-bit); Windows Server 2016 Standard Edition incl. 5 clients, multi-language (64-bit)
without operating system	Yes

Dimensions

Width	430 mm
Height	88 mm; 2U
Depth	444 mm

Approvals / Certificates

General Product Approval



[Manufacturer Declaration](#)

[Miscellaneous](#)



General Product Approval



[BIS CRS](#)

[China RoHS](#)



EMV | **Maritime application**



[NK / Nippon Kaiji Kyokai](#)

Maritime application | **Dangerous goods** | **Environment**



[CCS \(China Classification Society\)](#)

[KR \(Korean Register of Shipping\)](#)

[Dangerous goods information](#)

[Environmental Confirmations](#)

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