SIEMENS

Data sheet 6AG4112-2GA21-0BA0

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 500 GB HDD SATA, 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; without HW expansions without expansion (HW); Graphics onboard Windows 7 Ultimate, 64 bit, MUI (de, en, fr, es, it), SP1 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	
● Rated value 50 Hz	Yes
● Rated value 60 Hz	Yes
Mains buffering	
● 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)
Storage	
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	
● 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	
● Industrial Ethernet interface	
— 100 Mbps	Yes
— 1000 Mbps	Yes
Interrupts/diagnostics/status information	

Subject to change without notice
© Copyright Siemens

LED status display	POWER, HDD, ETHERNET 1, ETHERNET 2, PROFIBUS / MPI, SF PROFINET, WATCHDOG, TEMP, FAN, HDD0 ALARM, HDD1 ALARM
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/s² (0.5 g)
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	

Miscellaneous | Manufacturer Declaration








General Product Approval

Subject to change without notice
© Copyright Siemens

BIS CRS

China RoHS

EMV	Maritime application

Maritime application			Dangerous goods		
	CCS (China Classification Society)	KR (Korean Register of Shipping)	Dangerous goods information	Dangerous goods information	Test Summary Report UN 38.3

Environment	
Environmental Confirmations	Environmental Confirmations

last modified: 11/24/2025

Subject to change without notice
© Copyright Siemens