SIEMENS

Data sheet

6AG4131-3GJ00-3AA7

SIMATIC IPC627E (Box PC), UHD Graphics onboard; DP/DVI-D; 3x Gigbit Ethernet (IE/PN); 6x USB V3.1 Gen.2; 1x serial (COM 1); RAID controller onboard; Watchdog, temperature and fan monitoring; Core i7-8700 (6C/12T, 3.2(4.6) GHz, 12 MB cache, VT-d, AMT); M.2 SSD NVMe 512 GB; 4 GB DDR4-2666 (1x4); 24 V DC industrial power supply Windows 10 Enterprise 2019 LTSC, 64-bit, MUI (en, de, fr, it, es) For Core i7; without expansion (software); without expansion (HW); 2x PCIe (x16, x4); Enclosure painted;

Mounting Wall mounting, portrait mounting Design Box PC, built-in unit Supply voltage Type of supply voltage 100/240 V AC (autorange); 24 V DC Line frequency • Rated value 50 Hz Yes	
Supply voltage Type of supply voltage 100/240 V AC (autorange); 24 V DC Line frequency	
Type of supply voltage 100/240 V AC (autorange); 24 V DC Line frequency	
Line frequency	
• •	
Rated value 50 Hz Yes	
- 1 100	
Rated value 60 Hz Yes	
Mains buffering	
Mains/voltage failure stored energy time 20 ms	
Processor	
Processor type Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core i3-8100 (4C GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB VT-d, AMT)	
Chipset Intel C246	
Graphic	
Graphics controller Intel UHD Graphics 630 (Core i); Intel UHD Graphics 610 (Celeron)	
Drives	
Hard disk 2.5" SATA ≥ 320 GB	
SSD Yes; SSD M.2 NVMe 512 GB; SSD 2.5" SATA 480 / 960 GB; RAID1 2x 2.5" SATA 480 / 960 GB in removable drive bay	(SSD
Memory	
Type of memory DDR4-2666 DIMM	
Main memory 4 / 8 / 16 / 32 / 64 GB	
Capacity of main memory, max. 64 Gbyte	
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max. 512 kbyte; 128 KB can be stored in the buffer time	
Hardware configuration	
Slots	
• free slots 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2 (x16, x4); 5x PCIe (1x16, 2x4, 2x1); with card retainer	2x PCle
Number of PCI slots 5; Optional	
Number of PCI slots 5; Optional	
Interfaces	
Number of industrial Ethernet interfaces 3; 3x Ethernet (RJ45)	
USB port 6x USB 3.1 Gen. 2 (2x type C)	
Connection for keyboard/mouse USB / USB	
serial interface 1x COM	
Video interfaces	
• Graphics interface 2x DisplayPort; 1x DVI-D	
Industrial Ethernet	
• Industrial Ethernet interface 3x Ethernet (RJ45)	
— 100 Mbps Yes	
— 1000 Mbps Yes	
Integrated Functions	
Monitoring functions	
• Temperature monitoring Yes	
Watchdog Yes	

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Status LEDs Fan	1x power, 3x user Yes
Monitoring function via network	Optional
EMC	Optional
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC
electricity	61000-4-2
Interference immunity against high-frequency electromagnetic field	ds
 Interference immunity against high frequency radiation 	10 V/m for 80 2 700 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2.7 to 6 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 80 MHz, 80% AM acc. to IEC 61000-4-6
Interference immunity to cable-borne interference	
• Interference immunity on supply cables	±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric
 Interference immunity on signal cables >30m 	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
 Interference immunity on signal cables < 30m 	\pm 1 kV acc. to IEC 61000-4-4; burst; length < 3 m; \pm 2 kV acc. to IEC 61000-4-4; burst; length > 3 m
Interference immunity against voltage surge	
asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
Emission of conducted and non-conducted interference	FN 04000 0 0 FN 04000 0 / CIORD CO CI
Interference emission via line/AC current cables	EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
Degree and class of protection	IDOO
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes CF EN 64000 6 2:2007 1.44:2044 EN 64000 6 2:2005
EMC Marine enproved	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
Marine approval American Bureau of Shipping (ABS)	Yes
Det Norske Veritas (DNV)	Yes
Nippon Kaiji Kyokai (Class NK)	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	5 °C
• max.	55 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)
Vibrations	
 Vibration resistance during operation acc. to IEC 60068- 2-6 	tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g)
Shock testing	
Shock load during operation	Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks
Operating systems	
pre-installed operating system	Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI
without operating system	Yes; Optional
pre-installed operating system	
Windows 10 Enterprise	Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI
Software	
SIMATIC Software	Optional package with SIMATIC WinCC
Dimensions	

Width	314 mm
Height	93 mm; For variant 5x PCI(e): 155 mm
Depth	301 mm; incl. mounting rail

last modified:

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