## **SIEMENS**

## **Data sheet**

## 6AG4131-3GL20-1AA0

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; SSD 2.5" SATA 480 GB internal; 16 GB DDR4-2666 (2x8); 24 V DC industrial power supply Windows 10 Enterprise 2016 LTSB, 64 bit, MUI (en, de, fr, it, es) For Core i7; without expansion (software); without expansion (HW); 2x PCI

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		
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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		

Status LEDs	1x power, 3x user
• Fan	Yes
Monitoring function via network	Optional
EMC	
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 fields	
<ul> <li>Interference immunity against high frequency radiation</li> </ul>	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
<ul> <li>Interference immunity on signal cables &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
<ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>	$\pm 1$ 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 0.4 CIORE 00.01
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	IDOS
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 EMC	Yes CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
	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	160
Ambient conditions  Ambient temperature during operation	
min.	5 °C
• min. • 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	
<ul> <li>Vibration resistance during operation acc. to IEC 60068- 2-6</li> </ul>	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  Software	Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI
SIMATIC Software	Optional package with SIMATIC WinCC

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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