SIEMENS

Data sheet

6AG4131-3CC13-0AA0

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 i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); SSD 2.5" SATA 480 GB internal; 8 GB DDR4-2666 (2x4); 110/230 V AC industrial power supply unit with NAMUR; Power supply cable USA; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI (en, de, fr, it, es) For Celeron and Core i3; without expansion (software); without expansion (HW); 2x PCI

Installation type/mounting Mounting Wall mounting, portrait mounting Design Box PC, built-in unit Supply voltage 100/240 V.AC (autorange); 24 V.DC Line fequency Rated value 50 Hz Yes Rated value 50 Hz Yes Mains buffering Mains/voltage failure stored energy time 20 ms Processor Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core 13-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core 17-8700 (6C/12T, 3.2 (4.6) GHz, 1.2 MB cache; VT-d), Core 17-8700 (6C/12T, 3.2 MB cache; VT-d), Core 17-8700 (6C/12T, 3.2 MB cache; VT-d), Core 17-8700 (6C/12T, 3.2 MB cache; VT-d), Core 1		without expansion (software), without expansion (HW), 2x PCI
Design Box PC, built-in unit	Installation type/mounting	
Type of supply voltage	Mounting	Wall mounting, portrait mounting
Type of supply voltage	Design	Box PC, built-in unit
Line frequency Rated value 50 Hz Rated value 60 Hz Rated value 60 Hz Rated value 60 Hz Mains buffering Mains voltage failure stored energy time Processor Processor type Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache, VT-d); Core i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 MB	Supply voltage	
Rated value 50 Hz Rated value 60 Hz Yes Rated value 60 Hz Yes Mains buffering Mains voltage failure stored energy time Processor Processor Processor type Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core I3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core I7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d), MT) Chipset Intel C246 Graphic Graphic Intel UHD Graphics 630 (Core I); Intel UHD Graphics 810 (Celeron) Drivos Hard disk 2.5° SATA ≈ 320 GB Yes; SSD Mz. NVMe 512 GB; SSD 2.5° SATA 480 / 960 GB; RAID1 2x SSD 2.5° SATA 480 / 960 GB in removable drive bay Memory Type of memory JDR4-2666 DIMM Main memory A / / / 15 / 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 Siots • free slots	Type of supply voltage	100/240 V AC (autorange); 24 V DC
Reted value 60 Hz Mains buffering Coleron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 CHz, 6) GHz, 12 MB cache, VT-d, 6	Line frequency	
Mains buffering • Mains/voltage failure stored energy time	Rated value 50 Hz	Yes
■ Mains/voltage failure stored energy time	Rated value 60 Hz	Yes
Processor type Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache, VT-d); Core i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d, AMT) Chipset	Mains buffering	
Processor type Celeron C4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 MB cache, VT-d); Core i7-8700 (6	Mains/voltage failure stored energy time	20 ms
GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d, AMT) Chipset	Processor	
Graphic Graphic Scontroller 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 SSD 2.5" SATA 480 / 960	Processor type	GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache,
Intel UHD Graphics 630 (Core I); Intel UHD Graphics 610 (Celeron)	Chipset	Intel C246
Hard disk 2.5" SATA ≥ 320 GB SSD Yes; SSD M.2 NVMe 512 GB; SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 2.5" SATA 480 / 960 GB in removable drive bay 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 & 2x PCIe (x16, x4); 5x PCIe (x16, x4, x4); 5x PCIe (x16, x4); 5x	Graphic	
Hard disk 2.5" SATA ≥ 320 GB	Graphics controller	Intel UHD Graphics 630 (Core i); Intel UHD Graphics 610 (Celeron)
SSD Yes; SSD M.2 NVMe 512 GB; SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 2.5" SATA 480 / 960 GB in removable drive bay 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. Hardware configuration Slots • free slots • free slots (x16, x4); 5x PCIe (x16; 2x4, 2x1); with card retainer • Number of PCI slots • Number of PCI slots • Number of industrial Ethernet interfaces USB port Connection for keyboard/mouse serial interface 1x COM Video interfaces • Graphics interface 1x COM Video int	Drives	
Memory Type of memory DDR4-2666 DIMM Main memory A / 8 / 16 / 32 / 64 GB Capacity of main memory, max. G4 Gbyte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Hardware configuration Slots • free slots A / 8 / 12 / 32 / 64 GB 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2x PCIe (x16, x4); 5x PCIe (1x16, 2x4, 2x1); with card retainer • Number of PCI slots • Number of PCI slots • Number of PCI slots 5; Optional Interfaces Number of industrial Ethernet interfaces USB yort Connection for keyboard/mouse serial interface • Graphics interface • Graphics interface • Industrial Ethernet interface a x Ethernet (RJ45) Ves — 100 Mbps — 100 Mbps Yes Integrated Functions Monitoring functions	Hard disk	2.5" SATA ≥ 320 GB
Type of memory Main memory A / 8 / 16 / 32 / 64 GB Capacity of main memory, max. Bata areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Hardware configuration Slots • free slots • free slots • Number of PCI slots • Number of PCI slots • Number of industrial Ethernet interfaces Number of industrial Ethernet • Substance of Seraphics interface 1 x COM Video interfaces • Graphics interface • Industrial Ethernet interface • Industrial Ethern	SSD	
Main memory Capacity of main memory, max. 64 Gbyte Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Free slots • free slots • free slots • Number of PCI slots • Number of PCI slots • Number of industrial Ethernet interfaces USB port Connection for keyboard/mouse serial interface • Graphics interface • Graphics interface • Industrial Ethernet interface • Industrial Ethernet interface • Industrial Ethernet interface • Graphics interface • Industrial Ethernet inter	Memory	
Capacity of main memory, max. Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Hardware configuration Slots • free slots • free slots • Number of PCI slots • Number of PCI slots • Number of industrial Ethernet interfaces Number of industrial Ethernet interfaces USB port Connection for keyboard/mouse serial interface • Graphics interface • Industrial Ethernet interface • Industrial Ethernet interface • Industrial Ethernet interface 1 x COM Video interface • Industrial Ethernet interface 3 x Ethernet (RJ45) - 100 Mbps - 1000 Mbps Yes Integrated Functions Monitoring functions	Type of memory	DDR4-2666 DIMM
Data areas and their retentivity Retentive data area (incl. timers, counters, flags), max. Hardware configuration Slots • free slots • free slots • Number of PCI slots • Number of PCI slots • Number of PCI slots • Number of industrial Ethernet interfaces Number of rekyboard/mouse serial interface • Graphics interface Industrial Ethernet • Industrial Ethernet interface - 100 Mbps - 100 Mbps - 100 Mbps Yes Integrated Functions Monitoring functions	Main memory	4 / 8 / 16 / 32 / 64 GB
Retentive data area (incl. timers, counters, flags), max. Hardware configuration Slots • free slots • Number of PCI slots • Number of PCI slots • Number of PCI slots • Number of industrial Ethernet interfaces USB port Connection for keyboard/mouse serial interface • Graphics interface • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet interface • I	Capacity of main memory, max.	64 Gbyte
Hardware configuration Slots • free slots • Number of PCI slots • Number of PCI slots • Number of PCI slots • Number of PCI slots • Number of PCI slots • Number of PCI slots • Number of PCI slots • Spotional Interfaces Number of industrial Ethernet interfaces USB port Connection for keyboard/mouse serial interface • Graphics interface • Graphics interface Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet • Industrial Ethernet interface — 100 Mbps — 1000 Mbps — 1000 Mbps — Yes Integrated Functions Monitoring functions	Data areas and their retentivity	
Slots • free slots • free slots 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2x PCIe (x16, x4); 5x PCIe (x16, x4); 5x PCIe (x16, 2x4, 2x1); with card retainer • Number of PCI slots • Number of PCI slots 5; Optional Interfaces Number of industrial Ethernet interfaces USB port 6x USB 3.1 Gen. 2 (2x type C) Connection for keyboard/mouse serial interface 1x COM Video interfaces • Graphics interface 1x COM Industrial Ethernet • Industrial Ethernet interface - 100 Mbps - 100 Mbps - 100 Mbps - 100 Mbps - 100 Monitoring functions Monitoring functions		512 kbyte; 128 KB can be stored in the buffer time
free slots 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2x PCIe (x16, x4); 5x PCIe (x16, x4); with card retainer 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	Hardware configuration	
(x16, x4); 5x PCle (1x16, 2x4, 2x1); with card retainer Number of PCl slots Number of PCl 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 serial interface 1x COM Video interfaces Graphics interface 1x COM Industrial Ethernet Industrial Ethernet Industrial Ethernet interface 3x Ethernet (RJ45) Yes - 100 Mbps Yes Integrated Functions Monitoring functions	Slots	
Number of PCI slots Interfaces	• free slots	
Number of industrial Ethernet interfaces Number of industrial Ethernet interfaces USB port Connection for keyboard/mouse USB / USB serial interface Video interfaces Graphics interface Industrial Ethernet Industrial Ethernet interface Indu	 Number of PCI slots 	5; Optional
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 — 1000 Mbps — Yes — 1000 Mbps — Yes Integrated Functions Monitoring functions	Number of PCI slots	5; Optional
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	Interfaces	
Connection for keyboard/mouse 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	Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)
serial interface Video interfaces Graphics interface Video interface SubsplayPort; 1x DVI-D Industrial Ethernet Industrial Ethernet interface Industrial Ethernet interface Industrial Ethernet interface Ves 100 Mbps Yes Integrated Functions Monitoring functions	USB port	· , , ,
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	Connection for keyboard/mouse	USB / USB
Graphics interface Industrial Ethernet Industrial Ethernet interface	serial interface	1x COM
Industrial Ethernet Industrial Ethernet interface Industrial Ethernet interface Industrial Ethernet interface Industrial Ethernet interface Industrial Ethernet (RJ45) Yes Yes Integrated Functions Monitoring functions	Video interfaces	
Industrial Ethernet interface 3x Ethernet (RJ45) — 100 Mbps Yes — 1000 Mbps Yes Integrated Functions Monitoring functions	Graphics interface	2x DisplayPort; 1x DVI-D
- 100 Mbps Yes - 1000 Mbps Yes Integrated Functions Monitoring functions	Industrial Ethernet	
— 1000 Mbps Yes Integrated Functions Monitoring functions	 Industrial Ethernet interface 	3x Ethernet (RJ45)
Integrated Functions Monitoring functions	— 100 Mbps	Yes
Monitoring functions	— 1000 Mbps	Yes
·	Integrated Functions	
T V	Monitoring functions	
I emperature monitoring Yes	 Temperature monitoring 	Yes
Watchdog Yes	Watchdog	Yes

a Status I EDa	Av nower 2v year
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 enproval	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:

9/19/2021