

SIMATIC IPC227E (Nanobox PC); 1x display port; 2x 10/100/1000 Mbit/s Ethernet RJ45; 1 x USB3.0, 3 x USB2.0; CFast slot; 24 V DC industrial power supply Celeron N2930 (4C/4T) 4 GB RAM; Box: Basis without COM WIN Embedded Standard 7 P SP1, English; 32 bit 320 GB HDD; without SIMATIC software Vertical mounting

Installation type/mounting	
Mounting	DIN rail, wall mounting, portrait mounting
Design	Box PC, built-in unit
Supply voltage	
Type of supply voltage	24 V DC
Mains buffering	
• Mains/voltage failure stored energy time	20 ms
Processor	
Processor type	Intel Celeron N2807 / N2930 / E3845
Drives	
Hard disk	2.5" SATA ≥ 320 GB
SSD	Yes; ≥ 128 GB optional
Memory	
Type of memory	DDR3L
Main memory	2 / 4 / 8 GB
Capacity of main memory, max.	8 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; optional
Hardware configuration	
Slots	
• free slots	1x PCIe (x1) (optional)
• Number of PCI slots	1; Optional
• Number of compact flash slots	1; CFast
Interfaces	
USB port	1x USB 3.0 / 3x USB 2.0
Connection for keyboard/mouse	USB / USB
serial interface	Without / 2x COM (RS 232 / 422 / 485), selectable in the BIOS
Video interfaces	
• Graphics interface	1x DisplayPort
Industrial Ethernet	

- Industrial Ethernet interface
 - 100 Mbps
 - 1000 Mbps

2x Ethernet (RJ45)
Yes
Yes

Integrated Functions

Monitoring functions

- Temperature monitoring Yes
- Watchdog Yes
- Status LEDs 1x power, 3x user
- Fan No
- Monitoring function via network Optional

EMC

Interference immunity against discharge of static electricity

- Interference immunity against discharge of static electricity ± 6 kV contact discharge acc. to IEC 61000-4-2; ± 8 kV air discharge acc. to IEC 61000-4-2

Interference immunity against high-frequency electromagnetic fields

- Interference immunity against high frequency radiation 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 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 ± 1 kV acc. to IEC 61000-4-4, burst; length < 3 m; ± 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

- 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

IP degree of protection	IP40
IP (at the front)	IP40
IP (rear)	IP40

Standards, approvals, certificates

CE mark	Yes
UL approval	Yes
• UL 508	Yes
cULus	Yes

RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-4:2007, EN 61000-6-2:2005
Dust protection	Protection against foreign bodies > 1 mm
Use in hazardous areas	
• ATEX Zone 2	Yes; Optional
• IECEx Zone 2	Yes; Optional
• cULus Class I Zone 2, Division 2	Yes; Optional
Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Korean Register of Shipping (KRS)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes
• Chinese Classification Society (CCS)	Yes
Ambient conditions	
Ambient temperature during operation	
• Ambient temperature during operation	0 °C up to 60 °C (-20 °C as option)
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 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation)
Operating systems	
pre-installed operating system	Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 E/P, 32-bit / 64-bit
without operating system	Yes; Optional
pre-installed operating system	
• Windows 7	Yes; Ultimate 32 bit or 64 bit
• Windows 10 Enterprise	Yes; Windows 10 Enterprise 2016 LTSC, 64 bit, MUI
Software	
SIMATIC Software	Optionally with pre-installed SIMATIC WinCC RT Advanced / Software Controller CPU 1500S software bundle
Dimensions	
Width	191 mm
Height	100 mm

Depth

60 mm

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