SIEMENS

Data sheet

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 N2807 (2C/2T) 4 GB RAM; Box: Basis with COM 1/2 without operating system without mass storage, with CFast slot without SIMATIC software DIN rail 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	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
— 100 Mbps	Yes
— 1000 Mbps	Yes

Integrated Functions

Monitoring functions

• Temperature monitoring	Yes
• Watchdog	Yes
• Status LEDs	Yes
• 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 (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

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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
Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (Class NK)	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

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
pre-installed operating system	
• Windows 7	Yes; Ultimate 32 bit or 64 bit
• Windows 10 Enterprise	Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI

Dimensions	
Width	191 mm
Height	100 mm
Depth	60 mm
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