SIEMENS

Data sheet 6ES7647-8BB31-7EA1

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) 8 GB RAM; Box: Basis without COM Windows 10 IoT Enterprise LTSB 2016, 64 bit, MUI (en, de, fr, it, es) 256 GB Eco SSD; without SIMATIC software DIN rail mounting

General information	
Product type designation	IPC227E
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, Intel Atom E3845
Chipset	SoC
Graphic	
Graphics controller	Integrated
Drives	
Hard disk	2.5" SATA ≥ 320 GB
SSD	Yes; 256 Eco / 240 / 480 GB
Storage	
Type of memory	DDR3L SO-DIMM
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	
● Number of PCI slots	1; Optional
● Number of compact flash slots	1; CFast
Interfaces	
Number of industrial Ethernet interfaces	2; 2x Ethernet (RJ45)
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	Yes
— 1000 Mbps	Yes
Interrupts/diagnostics/status information	
LED status display	1x power, 3x user
Integrated Functions	
Monitoring functions	
● Temperature monitoring	Yes
● Fan	No
● Monitoring function via network	Optional
Degree and class of protection	
IP degree of protection	IP40
Standards, approvals, certificates	

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CE mark	Yes
UL approval	Yes
● UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
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
● 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	
● min.	0 °C; -20 °C as option
● max.	60 °C
Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °C
Vibrations	
● Vibration resistance during operation acc. to IEC 60068-2-6	tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s² (1 g)
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	Yes; Windows 10 IoT Enterprise 2016 LTSB, 64bit, MUI
● Windows 10 Enterprise	Yes; Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI
Dimensions	
Width	191 mm
Height	100 mm
Depth	60 mm

Classifications

	Version	Classification
eClass	16	19-20-01-02
eClass	14	19-20-01-02
eClass	12	19-20-01-02
eClass	9.1	19-20-01-02
eClass	9	19-20-01-02
eClass	8	19-20-01-02
eClass	7.1	19-20-01-02
eClass	6	19-20-01-02
ETIM	10	EC001413
ETIM	9	EC001413
ETIM	8	EC001413
ETIM	7	EC001413

Approvals / Certificates

General Product Approval

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Miscellaneous | Manufacturer Declaration

General Product Approval

BIS CRS | China RoHS

For use in hazardous locations

Miscellaneous

Maritime application

Maritime application

NK / Nippon Kaiji Kyokai | CCS (China Classification Society) | KR (Korean Register of Shipping)

Dangerous goods

Dangerous goods information | Test Summary Report UN 38.3

Dangerous goods

Test Summary Report UN 38.3 | Dangerous goods information

Environment

Environmental Confirmations | Environmental Confirmations

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