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## Data sheet 6ES7647-8BD31-0CW1

SIMATIC IPC227E (Nanobox PC); 1x display port; 2x 10/100/1000 Mbps Ethernet RJ45; 1x USB3.0, 3x USB2.0; CFast slot; 24 V DC industrial power supply Industrial Edge (Simatic)




| | |
|---|---|
| **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 N2930 |
| Chipset | SoC |
| **Graphic** | |
| Graphics controller | Integrated |
| **Drives** | |
| SSD | Yes; 240 GB |
| **Storage** | |
| Type of memory | DDR3L SO-DIMM |
| Main memory | 8 GB RAM |
| Capacity of main memory, max. | 8 Gbyte |
| **Hardware configuration** | |
| Slots | |
| ● Number of compact flash slots | 1; CFast |
| **Interfaces** | |
| Number of industrial Ethernet interfaces | 2; 2x Ethernet (RJ45) |
| serial interface | No |
| 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 |


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| | |
|---|---|
| ● Monitoring function via network | Optional |
| **Degree and class of protection** | |
| IP degree of protection | 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 |
| 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 | |
| ● min. | 0 °C |
| ● max. | 50 °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 | SIMATIC Industrial OS |
| **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 |
| IDEA | 4 | 6606 |


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|---|---|---|---|
| UNSPSC | 15 | 43-21-15-06 | |

## Approvals / Certificates

### General Product Approval

Miscellaneous | Manufacturer Declaration | Declaration of Conformity | CE EG-Konf. | UKCA | UL

### General Product Approval

KC | RCM | EAC | BIS CRS | China RoHS | CE EG-Konf.

### General Product Approval | For use in hazardous locations | Maritime application

UKCA | Ex ATEX | Miscellaneous | IECEx IECEx | ABS | Bureau Veritas

### Maritime application

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

### Dangerous goods | Environment

| Dangerous goods | | | | Environment | |
|---|---|---|---|---|---|
| Test Summary Report UN 38.3 | Dangerous goods information | Dangerous goods information | Test Summary Report UN 38.3 | Environmental Confirmations | Environmental Confirmations |

**last modified:** 11/25/2025


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