

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) 8 GB RAM; Box: Basis without COM Windows 10 IoT Enterprise LTSB 2016, 64 bit, MUI (en, de, fr, it, es) 128 GB SSD; 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 | |
| <ul style="list-style-type: none"> 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 | |
| <ul style="list-style-type: none"> free slots Number of PCI slots Number of compact flash slots | 1x PCIe (x1) (optional) 1; Optional 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 | |
| <ul style="list-style-type: none"> 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 |
| 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 | |
| <ul style="list-style-type: none"> • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (Class NK) | <ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes |
| Ambient conditions | |
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> • Ambient temperature during operation | 0 °C up to 60 °C (-20 °C as option) |
| Ambient temperature during storage/transportation | |
| <ul style="list-style-type: none"> • min. • max. | <ul style="list-style-type: none"> -20 °C 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 | |
| <ul style="list-style-type: none"> • Windows 7 • Windows 10 Enterprise | <ul style="list-style-type: none"> Yes; Ultimate 32 bit or 64 bit Yes; Windows 10 Enterprise 2016 LTSC, 64 bit, MUI |
| Dimensions | |
| Width | 191 mm |
| Height | 100 mm |
| Depth | 60 mm |
| last modified: | 02/13/2020 |