SIEMENS

## Data sheet 6AV7882-0CA20-1LA0

| | |
|---|---|
| | SIMATIC IPC277E (Nanopanel PC); 12" Touch TFT; 2x 10/100/1000 Mbps Ethernet RJ45; 1x display port graphic; 1x USB 3.0; 3x USB 2.0; 1x serial (COM 1); CFast slot; 24 V DC power supply Celeron N2807 (2C/2T) 4 GB RAM; WIN Embedded Standard 7E SP1, English; 32 bit 8 GB CFAST; without SIMATIC software |
| **General information** | |
| Product type designation | IPC277E |
| **Display** | |
| Design of display | 12" TFT touch |
| Screen diagonal | 12 in |
| Resolution (pixels) | |
| ● Horizontal image resolution | 1 280 pixel |
| ● Vertical image resolution | 800 pixel |
| Backlighting | |
| ● MTBF backlighting (at 25 °C) | 80 000 h |
| **Control elements** | |
| Touch operation | |
| ● Design as touch screen | Yes; analog, resistive |
| **Installation type/mounting** | |
| Design | Panel PC, built-in unit |
| central design | Yes |
| Mounting in portrait format possible | Yes |
| **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 |
| Chipset | SoC |
| **Graphic** | |
| Graphics controller | Integrated |
| **Drives** | |
| 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 compact flash slots | 1; CFast |
| **Interfaces** | |
| Number of industrial Ethernet interfaces | 2; 2x Ethernet (RJ45) |
| serial interface | 1x COM (1x 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 |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| **Interrupts/diagnostics/status information** | |
| LED status display | No |
| **Integrated Functions** | |
| Monitoring functions | |
| ● Temperature monitoring | Yes |
| ● Fan | No |
| ● Monitoring function via network | Optional |
| **Degree and class of protection** | |
| IP (at the front) | IP65 |
| IP (rear) | IP20 |
| **Standards, approvals, certificates** | |
| CE mark | Yes |
| UL approval | Yes |
| ● UL 508 | Yes |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |
| KC approval | Yes |
| FCC | Yes |
| Marine approval | |
| ● Germanischer Lloyd (GL) | Yes; 7", 9", 12" single-touch |
| ● American Bureau of Shipping (ABS) | Yes; 7", 9", 12" ST; 12", 15", 19" MT |
| ● Bureau Veritas (BV) | Yes; 7", 9", 12" ST; 12", 15", 19" MT |
| ● Det Norske Veritas (DNV) | Yes; 7", 9", 12" ST; 12", 15", 19" MT |
| ● Korean Register of Shipping (KRS) | Yes; 7", 9", 12" ST; 12", 15", 19" MT |
| ● Lloyds Register of Shipping (LRS) | Yes; 7", 9", 12" ST; 12", 15", 19" MT |
| ● Nippon Kaiji Kyokai (Class NK) | Yes; 7", 9", 12" ST; 12", 15", 19" MT |
| ● Chinese Classification Society (CCS) | Yes; 7", 9", 12" ST; 12", 15", 19" MT |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● min. | 0 °C |
| ● max. | 50 °C; 19": max. 45 °C |
| Ambient temperature during storage/transportation | |
| ● min. | -20 °C |
| ● max. | 60 °C |
| Vibrations | |
| ● Vibration resistance during operation acc. to IEC 60068-2-6 | Tested according to IEC 60068-2-6: 5 Hz to 8.4 Hz: 3.5 mm, 8.4 Hz to 500 Hz: 9.8 m/s² |
| **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 of the housing front | 330 mm |
| Height of housing front | 241 mm |
| Mounting cutout, width | 310 mm |
| Mounting cutout, height | 221 mm |
| mounting depth | 73 mm |
| **Weights** | |
| Weight, approx. | 2.75 kg |

**Classifications**

| | Version | Classification |
|---|---|---|
| eClass | 16 | 19-20-01-03 |
| eClass | 14 | 19-20-01-03 |
| eClass | 12 | 19-20-01-03 |


Subject to change without notice
© Copyright Siemens

| | | |
|---|---|---|
| eClass | 9.1 | 19-20-01-03 |
| eClass | 9 | 19-20-01-03 |
| eClass | 8 | 27-24-23-01 |
| eClass | 7.1 | 27-24-23-01 |
| eClass | 6 | 27-24-23-01 |
| ETIM | 10 | EC001414 |
| ETIM | 9 | EC001414 |
| ETIM | 8 | EC001414 |
| ETIM | 7 | EC001414 |

## Approvals / Certificates

### General Product Approval

Miscellaneous

Manufacturer Declaration












### General Product Approval




China RoHS







### Maritime application







### Maritime application







NK / Nippon Kaiji Kyokai

CCS (China Classification Society)

KR (Korean Register of Shipping)

### Dangerous goods

Test Summary Report UN 38.3

### Dangerous goods

Dangerous goods information

Dangerous goods information

Test Summary Report UN 38.3

### Environment

Environmental Confirmations

Environmental Confirmations

**last modified:** 6/11/2026


Subject to change without notice
© Copyright Siemens