

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 N2930 (4C/4T) 8 GB RAM; without operating system 480 GB SSD; 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                                                          |
| Interrupts/diagnostics/status information                 |                                                              |

|                                                               |                                                                                                   |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| LED status display                                            | No                                                                                                |
| <b>Integrated Functions</b>                                   |                                                                                                   |
| <b>Monitoring functions</b>                                   |                                                                                                   |
| • Temperature monitoring                                      | Yes                                                                                               |
| • Fan                                                         | No                                                                                                |
| • Monitoring function via network                             | Optional                                                                                          |
| <b>Degree and class of protection</b>                         |                                                                                                   |
| IP (at the front)                                             | IP65                                                                                              |
| IP (rear)                                                     | IP20                                                                                              |
| <b>Standards, approvals, certificates</b>                     |                                                                                                   |
| CE mark                                                       | Yes                                                                                               |
| UL approval                                                   | Yes                                                                                               |
| • UL 508                                                      | Yes                                                                                               |
| cULus                                                         | Yes                                                                                               |
| RCM (formerly C-TICK)                                         | Yes                                                                                               |
| KC approval                                                   | Yes                                                                                               |
| FCC                                                           | Yes                                                                                               |
| <b>Marine approval</b>                                        |                                                                                                   |
| • 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                                                             |
| <b>Ambient conditions</b>                                     |                                                                                                   |
| <b>Ambient temperature during operation</b>                   |                                                                                                   |
| • min.                                                        | 0 °C                                                                                              |
| • max.                                                        | 50 °C; 19": max. 45 °C                                                                            |
| <b>Ambient temperature during storage/transportation</b>      |                                                                                                   |
| • min.                                                        | -20 °C                                                                                            |
| • max.                                                        | 60 °C                                                                                             |
| <b>Vibrations</b>                                             |                                                                                                   |
| • 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/s <sup>2</sup> |
| <b>Operating systems</b>                                      |                                                                                                   |
| 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                                                                                     |
| <b>pre-installed operating system</b>                         |                                                                                                   |
| • Windows 7                                                   | Yes; Ultimate 32 bit or 64 bit                                                                    |
| • Windows 10                                                  | Yes; Windows 10 IoT Enterprise 2016 LTSC, 64bit, MUI                                              |
| • Windows 10 Enterprise                                       | Yes; Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI                                             |
| <b>Dimensions</b>                                             |                                                                                                   |
| 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                                                                                             |
| <b>Weights</b>                                                |                                                                                                   |
| Weight, approx.                                               | 2.75 kg                                                                                           |
| <b>Approvals / Certificates</b>                               |                                                                                                   |
| <b>General Product Approval</b>                               |                                                                                                   |



[Manufacturer Declaration](#)

[Miscellaneous](#)



[China RoHS](#)

|                          |                      |
|--------------------------|----------------------|
| General Product Approval | Maritime application |
|--------------------------|----------------------|



|                      |                 |
|----------------------|-----------------|
| Maritime application | Dangerous goods |
|----------------------|-----------------|

[NK / Nippon Kaiji Ky-  
okai](#)

[KR \(Korean Register  
of Shipping\)](#)

[Dangerous goods in-  
formation](#)

[Test Summary Report  
UN 38.3](#)

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