

SIMATIC IPC 477E 22" Multitouch (1920 x 1080); 4 USB (back), Ethernet (10/100/1000); Core i5-6442EQ; 3x Gbit Ethernet (IE/PN); 8 GB; without RS 232/RS485; 1x PCIe (x4); without operating system; Without replaceable mass storage; without internal mass storage; Without SIMATIC software; 24 V DC industrial power supply

| General information                                       |                                                                                                                                                                                                            |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product type designation                                  | IPC477E                                                                                                                                                                                                    |
| Display                                                   |                                                                                                                                                                                                            |
| Design of display                                         | 22" TFT multi-touch                                                                                                                                                                                        |
| Screen diagonal                                           | 21.5 in                                                                                                                                                                                                    |
| Resolution (pixels)                                       |                                                                                                                                                                                                            |
| • Horizontal image resolution                             | 1 920 pixel                                                                                                                                                                                                |
| • Vertical image resolution                               | 1 080 pixel                                                                                                                                                                                                |
| Backlighting                                              |                                                                                                                                                                                                            |
| • MTBF backlighting (at 25 °C)                            | 30 000 h                                                                                                                                                                                                   |
| Control elements                                          |                                                                                                                                                                                                            |
| Keyboard fonts                                            |                                                                                                                                                                                                            |
| • Function keys                                           | No                                                                                                                                                                                                         |
| • alphanumeric keyboard                                   | No                                                                                                                                                                                                         |
| Touch operation                                           |                                                                                                                                                                                                            |
| • Design as multi-touch screen                            | Yes; Projective-capacitive                                                                                                                                                                                 |
| Installation type/mounting                                |                                                                                                                                                                                                            |
| Mounting                                                  | For horizontal and vertical mounting                                                                                                                                                                       |
| Design                                                    | Panel PC, built-in unit                                                                                                                                                                                    |
| central design                                            | Yes                                                                                                                                                                                                        |
| distributed design                                        | No                                                                                                                                                                                                         |
| Mounting in portrait format possible                      | Yes                                                                                                                                                                                                        |
| Supply voltage                                            |                                                                                                                                                                                                            |
| Type of supply voltage                                    | 100/240 V AC (autorange) 50/60 Hz; optional 24 V DC                                                                                                                                                        |
| Rated value (DC)                                          | 24 V; PELV / SELV floating                                                                                                                                                                                 |
| Line frequency                                            |                                                                                                                                                                                                            |
| • Rated value 50 Hz                                       | Yes                                                                                                                                                                                                        |
| • Rated value 60 Hz                                       | Yes                                                                                                                                                                                                        |
| Mains buffering                                           |                                                                                                                                                                                                            |
| • Mains/voltage failure stored energy time                | 20 ms                                                                                                                                                                                                      |
| Processor                                                 |                                                                                                                                                                                                            |
| Processor type                                            | Celeron G3902 (2C/2T, 1.6 GHz, 2 MB Cache); Core i3-6102E (2C/4T, 1.9 GHz, 3 MB Cache); Core i5-6442EQ (4C/4T, 1.9 (2.7) GHz, 6 MB Cache, iAMT); Xeon E3-1505L v5 (4C/8T, 2.0 (2.8) GHz, 8 MB Cache, iAMT) |
| Chipset                                                   | Intel C236 / Intel H110                                                                                                                                                                                    |
| Graphic                                                   |                                                                                                                                                                                                            |
| Graphics controller                                       | Intel HD graphics controller                                                                                                                                                                               |
| Drives                                                    |                                                                                                                                                                                                            |
| Hard disk                                                 | 2.5" SATA ≥ 320 GB                                                                                                                                                                                         |
| SSD                                                       | Yes; 128 / 240 / 480 GB                                                                                                                                                                                    |
| Memory                                                    |                                                                                                                                                                                                            |
| Type of memory                                            | DDR4-2400 SO-DIMM                                                                                                                                                                                          |
| Main memory                                               | 4 / 8 / 16 GB, ECC optional                                                                                                                                                                                |
| Capacity of main memory, max.                             | 16 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                                    |                                                                                                                                                                                                            |

|                                                            |                                                                                        |
|------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Slots</b>                                               |                                                                                        |
| • Number of PCI slots                                      | 1; Optional                                                                            |
| • Number of compact flash slots                            | 1; CFast                                                                               |
| <b>Interfaces</b>                                          |                                                                                        |
| Number of industrial Ethernet interfaces                   | 3; 3x Ethernet (RJ45)                                                                  |
| <b>Video interfaces</b>                                    |                                                                                        |
| • Graphics interface                                       | 2x DisplayPort                                                                         |
| <b>Industrial Ethernet</b>                                 |                                                                                        |
| • Industrial Ethernet interface                            |                                                                                        |
| — 100 Mbps                                                 | Yes                                                                                    |
| — 1000 Mbps                                                | Yes                                                                                    |
| <b>Interrupts/diagnostics/status information</b>           |                                                                                        |
| Bus diagnostics                                            | Yes                                                                                    |
| <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                                                                                    |
| CSA approval                                               | Yes                                                                                    |
| UL approval                                                | Yes                                                                                    |
| • UL 508                                                   | Yes                                                                                    |
| cULus                                                      | Yes                                                                                    |
| RCM (formerly C-TICK)                                      | Yes                                                                                    |
| KC approval                                                | Yes                                                                                    |
| EAC (formerly Gost-R)                                      | Yes                                                                                    |
| FCC                                                        | Yes                                                                                    |
| <b>Use in hazardous areas</b>                              |                                                                                        |
| • ATEX Zone 2                                              | Yes; for inscription on device rating plate                                            |
| • ATEX Zone 22                                             | Yes; for inscription on device rating plate                                            |
| • IECEx Zone 2                                             | Yes; for inscription on device rating plate                                            |
| • IECEx Zone 22                                            | Yes; for inscription on device rating plate                                            |
| • CCC Ex                                                   | Yes; for inscription on device rating plate                                            |
| • cULus Class I Zone 1                                     | No                                                                                     |
| • cULus Class I Zone 2, Division 2                         | Yes; for inscription on device rating plate                                            |
| • cULus Class II Division 2                                | Yes; for inscription on device rating plate                                            |
| • FM Class I Division 2                                    | No                                                                                     |
| • FM Class II Division 2                                   | No                                                                                     |
| <b>Marine approval</b>                                     |                                                                                        |
| • 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                                                                                    |
| <b>Ambient conditions</b>                                  |                                                                                        |
| <b>Ambient temperature during operation</b>                |                                                                                        |
| • min.                                                     | 0 °C                                                                                   |
| • 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- | IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s <sup>2</sup> (with SSD or |

| Operating systems              |                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------|
| pre-installed operating system | Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 |
| without operating system       | Yes; Optional                                                                                           |

|                                                                         |                                                   |
|-------------------------------------------------------------------------|---------------------------------------------------|
| pre-installed operating system                                          |                                                   |
| <ul style="list-style-type: none"> <li>Windows 7</li> </ul>             | Yes; Ultimate 64 bit                              |
| <ul style="list-style-type: none"> <li>Windows 10 Enterprise</li> </ul> | Yes; Windows 10 Enterprise 2016 LTSC, 64 bit, MUI |

| Dimensions                 |        |
|----------------------------|--------|
| Width of the housing front | 529 mm |
| Height of housing front    | 331 mm |
| Mounting cutout, width     | 513 mm |
| Mounting cutout, height    | 315 mm |
| mounting depth             | 76 mm  |

| Weights         |        |
|-----------------|--------|
| Weight, approx. | 7.9 kg |

| Approvals / Certificates |                                |
|--------------------------|--------------------------------|
| General Product Approval | For use in hazardous locations |

[Miscellaneous](#)



[BIS CRS](#)

[China RoHS](#)



| For use in hazardous locations | Maritime application |
|--------------------------------|----------------------|
|--------------------------------|----------------------|

[Type Examination Certificate](#)



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

[NK / Nippon Kaiji Kyokai](#)

[Dangerous goods information](#)

[Test Summary Report UN 38.3](#)

last modified:

5/22/2026