

SIMATIC IPC 477E 22" Multitouch (1920 x 1080); 4 USB (back), Ethernet (10/100/1000); Core i5-6442EQ; 3x Gbit Ethernet (IE/PN); 4 GB without RS 232/RS485; without PCIe; without operating system; Without replaceable mass storage; 240 GB solid-state drive SATA 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                                                  |                                                                                                                                                                                                            |
| • 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                                                                                                                                                                                    |
| Storage                                                   |                                                                                                                                                                                                            |
| 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)                                         |
| serial interface                                         | Without / 2x COM (RS 232 / 422 / 485), selectable in the BIOS |
| <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 60068-2-6

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 CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s<sup>2</sup> (hard disk)

#### 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 |                                                                                                         |
| • Windows 7                    | Yes; Ultimate 64 bit                                                                                    |
| • Windows 10 Enterprise        | Yes; Windows 10 Enterprise 2016 LTSP, 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](#)

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