


SIMATIC IPC 477E 19" Multitouch (1366 x 768); 4 USB (back), Ethernet (10/100/1000); Core i5-6442EQ; 3x Gbit Ethernet (IE/PN); 16 GB and NVRAM; without RS 232/RS485; without PCIe; Win Embedded Standard 7 P SP1, MUI, 64-bit, multi-touch; 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   | 19" TFT multi-touch  |
| Screen diagonal   | 18.5 in  |
| Resolution (pixels)                                       |  |
| • Horizontal image resolution                             | 1 366 pixel  |
| • Vertical image resolution                               | 768 pixel  |
| Backlighting  |  |
| • MTBF backlighting (at 25 °C)                            | 50 000 h   |
| Control elements  |  |
| Input device  |  |
| • Mouse, at front   | No   |
| 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  |
| Line frequency  |  |
| • Rated value 50 Hz                                       | Yes  |
| • Rated value 60 Hz                                       | Yes  |
| Mains buffering   |  |
| • Mains/voltage failure stored energy time                | 20 ms  |
| Power loss  |  |
| In full configuration                                     | 24 V DC: max. 82 W, 110 ... 230 V AC   |
| 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  |   |
|---|---|
| Slots   |   |
| <ul style="list-style-type: none"> <li>• free slots</li> </ul>  | 1x PCIe (slot with card retainer), 1x slot for CFAST card   |
| <ul style="list-style-type: none"> <li>• Number of PCI slots</li> </ul>   | 1; Optional   |
| <ul style="list-style-type: none"> <li>• Number of compact flash slots</li> </ul>                                 | 1; CFAST  |
| Interfaces  |   |
| Number of industrial Ethernet interfaces  | 3; 3x Ethernet (RJ45)   |
| USB port  | 4x USB 3.0  |
| 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"> <li>• Graphics interface</li> </ul>  | 2x DisplayPort  |
| Industrial Ethernet   |   |
| <ul style="list-style-type: none"> <li>• Industrial Ethernet interface</li> </ul>                                 | 3x Ethernet (RJ45)  |
| <ul style="list-style-type: none"> <li>— 100 Mbps</li> </ul>  | Yes   |
| <ul style="list-style-type: none"> <li>— 1000 Mbps</li> </ul>   | Yes   |
| Interrupts/diagnostics/status information   |   |
| Bus diagnostics   | Yes   |
| Integrated Functions  |   |
| Monitoring functions  |   |
| <ul style="list-style-type: none"> <li>• Temperature monitoring</li> </ul>  | Yes   |
| <ul style="list-style-type: none"> <li>• Watchdog</li> </ul>  | Yes   |
| <ul style="list-style-type: none"> <li>• Fan</li> </ul>   | No  |
| <ul style="list-style-type: none"> <li>• Monitoring function via network</li> </ul>                               | Optional  |
| EMC   |   |
| Interference immunity against discharge of static electricity   |   |
| <ul style="list-style-type: none"> <li>• Interference immunity against discharge of static electricity</li> </ul> | ±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   |   |
| <ul style="list-style-type: none"> <li>• Interference immunity against high frequency radiation</li> </ul>        | 10 V/m, 80 ... 2 000 MHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m, 2 ... 2.7 GHz; 10 V, 10 kHz ... 80 MHz acc. to IEC 61000-4-6    |
| Interference immunity to cable-borne interference   |   |
| <ul style="list-style-type: none"> <li>• Interference immunity on supply cables</li> </ul>                        | ±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 |
| <ul style="list-style-type: none"> <li>• Interference immunity on signal cables &gt;30m</li> </ul>                | ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m   |
| <ul style="list-style-type: none"> <li>• Interference immunity on signal cables &lt; 30m</li> </ul>               | ±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   |   |
| <ul style="list-style-type: none"> <li>• asymmetric interference</li> </ul>                                       | ±2 kV acc. to IEC 61000-4-5, surge asymmetric   |
| <ul style="list-style-type: none"> <li>• symmetric interference</li> </ul>  | ±1 kV acc. to IEC 61000-4-5, surge symmetric  |
| Interference immunity to magnetic fields  |   |
| <ul style="list-style-type: none"> <li>• Interference immunity to magnetic fields at 50 Hz</li> </ul>             | 100 A/m; to IEC 61000-4-8   |
| Emission of conducted and non-conducted interference  |   |
| <ul style="list-style-type: none"> <li>• Interference emission via line/AC current cables</li> </ul>              | EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A   |
| Degree and class of protection  |   |
| IP (at the front)   | IP65  |
| IP (rear)   | IP20  |
| Standards, approvals, certificates  |   |
| CE mark   | Yes   |
| CSA approval  | Yes   |
| UL approval   | Yes   |
| <ul style="list-style-type: none"> <li>• UL 508</li> </ul>  | Yes   |
| cULus   | Yes   |
| RCM (formerly C-TICK)   | Yes   |
| KC approval   | Yes   |
| EAC (formerly Gost-R)   | Yes   |
| FCC   | Yes   |
| EMC   | CE, EN 61000-6-4; CISPR 22:2004 Class A; FCC Class A  |
| Use in hazardous areas  |   |
| <ul style="list-style-type: none"> <li>• ATEX Zone 2</li> </ul>   | Yes; Optional, only with Multitouch   |
| <ul style="list-style-type: none"> <li>• ATEX Zone 22</li> </ul>  | Yes   |

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• IECEx Zone 2</li> <li>• cULus Class I Zone 2, Division 2</li> </ul>  | <p>Yes; Optional, only with Multitouch</p> <p>Yes; Optional, only with Multitouch</p>   |
| <b>Marine approval</b>  |   |
| <ul style="list-style-type: none"> <li>• Germanischer Lloyd (GL)</li> <li>• American Bureau of Shipping (ABS)</li> <li>• Bureau Veritas (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Korean Register of Shipping (KRS)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (Class NK)</li> </ul> | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>  |
| <b>Ambient conditions</b>   |   |
| <b>Ambient temperature during operation</b>   |   |
| <ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>  | <p>0 °C</p> <p>45 °C</p>  |
| <b>Ambient temperature during storage/transportation</b>  |   |
| <ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>  | <p>-20 °C</p> <p>60 °C</p>  |
| <b>Relative humidity</b>  |   |
| <ul style="list-style-type: none"> <li>• Relative humidity</li> </ul>   | Tested according to IEC 60068-2-78, IEC 60068-2-30: 5% to 80% at 25 °C (no condensation)  |
| <b>Vibrations</b>   |   |
| <ul style="list-style-type: none"> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> </ul>   | 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) |
| <b>Shock testing</b>  |   |
| <ul style="list-style-type: none"> <li>• Shock load during operation</li> </ul>   | IEC 60068-2-27; 150 m/s <sup>2</sup> , 11 ms (without hard disk); 50 m/s <sup>2</sup> , 30 ms (with hard disk)  |
| <b>Operating systems</b>  |   |
| 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   |
| <b>pre-installed operating system</b>   |   |
| <ul style="list-style-type: none"> <li>• Windows 7</li> <li>• Windows 10 Enterprise</li> </ul>  | <p>Yes; Ultimate 64 bit</p> <p>Yes; Windows 10 Enterprise 2016 LTSC, 64 bit, MUI</p>  |
| <b>Software</b>   |   |
| SIMATIC Software  | Optionally with pre-installed SIMATIC WinCC RT Advanced / Software Controller CPU 1500S software bundle   |
| <b>Dimensions</b>   |   |
| Width of the housing front  | 464 mm  |
| Height of housing front   | 294 mm  |
| Mounting cutout, width  | 448 mm  |
| Mounting cutout, height   | 278 mm  |
| Overall depth   | 76 mm   |
| <b>Weights</b>  |   |
| Weight, approx.   | 6.6 kg  |
| <b>last modified:</b>   | 11/8/2023    |