

SIMATIC IPC677D (Panel PC), 2x10/100/1000 Mbit/s Ethernet; 4x USB V3.0, 1x serial (COM1); Watchdog, temperature and Fan monitoring; RAID controller onboard; 22" Touch (1920x 1080); with front USB Core I3-4330TE (2C/4T, 2.4 GHz, 4 MB cache, VT-X) Solid-state drive 240 GB 16 GB DDR3 1600 DIMM; 1x PCIE (X16); 1x PCI without expansion (HW) Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it) SIMATIC IPC DiagMonitor enclosed AC 110/230V industrial power supply unit with NAMUR; Power supply cable USA

| General information                        |  |
|--|--|
| Product type designation                   | IPC677D  |
| Display                                    |  |
| Design of display                          | 22" TFT touch  |
| Screen diagonal                            | 22 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                           |  |
| Input device                               |  |
| • Mouse, at front                          | Front USB 2.0 (500mA)  |
| Touch operation                            |  |
| • Design as touch screen                   | Yes; analog, resistive   |
| Installation type/mounting                 |  |
| Mounting                                   | For horizontal and vertical mounting   |
| Design                                     | Panel PC, built-in unit  |
| central design                             | Yes  |
| Mounting in portrait format possible       | Yes  |
| maximum permissible installation angle +/- | 20°  |
| Supply voltage                             |  |
| Type of supply voltage                     | 100/240 V AC (autorange); 24 V DC  |
| Line frequency                             |  |
| • Rated value 50 Hz                        | Yes  |
| • Rated value 60 Hz                        | Yes  |
| Mains buffering                            |  |
| • Mains/voltage failure stored energy time | 10 ms  |
| Power loss                                 |  |
| In full configuration                      | 165 W  |
| Processor                                  |  |
| Processor type                             | Celeron G1820TE (2C/2T, 2.2 GHz, 2 MB Cache); Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB Cache); Xeon E3-1268L v3 (4C/8T, 2.3 (3.3) GHz, 8 MB Cache, AMT)  |
| Chipset                                    | Intel DH82C226 PCH   |
| Graphic                                    |  |
| Graphics controller                        | Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron)   |
| Drives                                     |  |
| Optical drives                             | DVD±R±RW combi-drive, optional   |
| Hard disk                                  | 3.5" SATA ≥ 500 GB, optional: 3.5" SATA ≥ 1 TB; RAID1 2x 2.5" SATA ≥ 320 GB; solid-state drive (SSD) ≥ 240 GB; all hard disk drives within the enclosure are vibration-damped; RAID1 2x 2.5" SATA ≥ 320 GB byte in removable drive bay |
| SSD  | Yes; ≥ 240 GB optional   |
| Memory                                     |  |
| Type of memory                             | DDR3-1600 DIMM   |
| Main memory                                | 2 / 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.           | 2 Mbyte; 128 KB can be stored in the buffer time; optional   |
| Hardware configuration  |  |
| Slots   |  |
| • free slots  | 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer  |
| • Number of PCI slots   | 2  |
| • Number of PCIe slots  | 2  |
| Interfaces  |  |
| PROFIBUS/MPI  | Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5622  |
| Number of industrial Ethernet interfaces                            | 2; 2x RJ45 (independent)   |
| Number of PROFINET interfaces                                       | 3; Optional  |
| USB port  | 4x USB 3.0   |
| Connection for keyboard/mouse                                       | USB / USB  |
| serial interface  | 1x COM1 (RS 232), optional: 1x COM2 (RS 232)   |
| parallel interface  | optional LPT1  |
| Video interfaces  |  |
| • Graphics interface  | 1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)   |
| Industrial Ethernet   |  |
| • Industrial Ethernet interface                                     | onboard, 2x 10 / 100 / 1 000 Mbit, RJ45  |
| — 100 Mbps  | Yes  |
| — 1000 Mbps   | Yes  |
| Interrupts/diagnostics/status information                           |  |
| Bus diagnostics   | Yes  |
| Integrated Functions  |  |
| Monitoring functions  |  |
| • Temperature monitoring  | Yes  |
| • Watchdog  | Yes  |
| • Status LEDs   | Yes  |
| • Fan   | Yes  |
| • Monitoring function via network                                   | Optional   |
| EMC   |  |
| Interference immunity against discharge of static electricity       |  |
| • Interference immunity against discharge of static electricity     | ±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 |  |
| • Interference immunity against high frequency radiation            | 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6 |
| Interference immunity to cable-borne interference                   |  |
| • Interference immunity on supply cables                            | ±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  |
| • Interference immunity on signal cables >30m                       | ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m  |
| • Interference immunity on signal cables < 30m                      | ±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                         |  |
| • asymmetric interference   | ±2 kV acc. to IEC 61000-4-5, surge asymmetric  |
| • symmetric interference  | ±1 kV acc. to IEC 61000-4-5, surge symmetric   |
| Interference immunity to magnetic fields                            |  |
| • Interference immunity to magnetic fields at 50 Hz                 | 100 A/m; to IEC 61000-4-8  |
| Emission of conducted and non-conducted interference                |  |
| • Interference emission via line/AC current cables                  | 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  |
| UL approval   | Yes  |
| • UL 508  | Yes  |
| cULus   | Yes  |
| RCM (formerly C-TICK)   | Yes  |
| KC approval   | Yes  |
| FCC   | Yes  |

|   |  |
|---|--|
| EMC   | CE, EN 61000-6-4:2007, EN 61000-6-2:2005   |
| <b>Ambient conditions</b>                                     |  |
| Ambient temperature during operation                          |  |
| • min.  | 5 °C   |
| • max.  | 45 °C  |
| Ambient temperature during storage/transportation             |  |
| • min.  | -20 °C   |
| • max.  | 60 °C  |
| Relative humidity   |  |
| • Relative humidity   | Tested according to IEC 60068-2-78, IEC 60068-2-30: 5% to 80% at 25 °C (no condensation)   |
| Vibrations  |  |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s <sup>2</sup> (1 g)                              |
| Shock testing   |  |
| • Shock load during operation                                 | Tested to DIN IEC 60068-2-29: 50 m/s <sup>2</sup> (5 g), 30 ms, 100 shocks   |
| <b>Operating systems</b>                                      |  |
| pre-installed operating system                                | Windows 7 Ultimate, 32-bit/64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI |
| without operating system                                      | Yes  |
| pre-installed operating system                                |  |
| • Windows 7   | Yes; Ultimate 32 bit or 64 bit   |
| • Windows 10 Enterprise                                       | Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  |
| <b>Software</b>   |  |
| SIMATIC Software  | Optional package with SIMATIC WinCC or WinAC RTX   |
| <b>Dimensions</b>   |  |
| Width of the housing front                                    | 560 mm   |
| Height of housing front                                       | 380 mm   |
| Mounting cutout, width  | 542 mm   |
| Mounting cutout, height                                       | 362 mm   |
| Overall depth   | 112 mm   |
| • additional mounting depth (optical drive)                   | 26 mm  |
| <b>Weights</b>  |  |
| Weight, approx.   | 16 kg  |

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