

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; 19" Touch (1366x 768); with front USB XEON E3-1268LV3 (4C/8T, 2.3 (3.3) GHz, 8 MB cache VT-D, AMT) Solid-state drive 240 GB 8 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it) without expansion (software) AC 110/230V industrial power supply unit with NAMUR; Power supply cable Europe

| General information                        |                                      |
|--|--------------------------------------|
| Product type designation                   | IPC677D                              |
| Display                                    |                                      |
| Design of display                          | 19" TFT touch                        |
| Screen diagonal                            | 19 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                          | 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   | 155 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 ≥ 250 GB, optional ≥ 500 GB; RAID1 2x 2.5" SATA ≥ 320 GB; all internal drives are vibration-damped  |
| 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  |   |
| <b>Slots</b>  |   |
| <ul style="list-style-type: none"> <li>• free slots</li> </ul>                    | 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer   |
| <ul style="list-style-type: none"> <li>• Number of PCI slots</li> </ul>           | 2   |
| <ul style="list-style-type: none"> <li>• Number of PCIe slots</li> </ul>          | 2   |
| Interfaces  |   |
| PROFIBUS/MPI  | Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5622   |
| 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   |
| <b>Video interfaces</b>   |   |
| <ul style="list-style-type: none"> <li>• Graphics interface</li> </ul>            | 1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)  |
| <b>Industrial Ethernet</b>  |   |
| <ul style="list-style-type: none"> <li>• Industrial Ethernet interface</li> </ul> | Onboard, 2x 10 / 100 / 1000 Mbit, RJ45  |
| <ul style="list-style-type: none"> <li>— 100 Mbps</li> </ul>                      | Yes   |

— 1000 Mbps

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 - 1000 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                          |   |
| • Ambient temperature during operation                        | +5 °C to +45 °C with full configuration   |
| 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> (1g)                            |
| 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>                                      |   |
| Operating system  | Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows 10 IoT Enterprise LTSC 2015, 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI |
| pre-installed operating system                                | Yes   |
| without operating system                                      | Yes   |
| pre-installed operating system                                |   |
| • Windows 7   | Yes; Ultimate 32 bit or 64 bit  |
| • Windows 10 Enterprise                                       | Yes; LTSC 2015, 64-bit, MUI   |
| <b>Software</b>   |   |
| SIMATIC Software  | Optional package with SIMATIC WinCC or WinAC RTX  |
| <b>Dimensions</b>   |   |
| Width of the housing front                                    | 483 mm  |
| Height of housing front                                       | 337 mm  |
| Overall depth   |   |
| • additional mounting depth (optical drive)                   | 26 mm   |
| Mounting cutout/device depth (W x H x T)                      | 465 mm x 319 mm x 112 mm  |
| <b>Weights</b>  |   |
| Panel PC in central design, approx.                           | 14 kg   |
| <b>last modified:</b>   | 01/14/2019  |