

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; 15" Multitouch (1366x 768) XEON E3-1268LV3 (4C/8T, 2.3 (3.3) GHz, 8 MB cache VT-D, AMT); PROFIBUS/MPI CP 5622-compatible); 2 MB buffered SRAM 500 GB HDD SATA; DVD +/-RW; 8 GB DDR3 1600 DIMM; 1x PCIE (X16); 1x 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 UK

| General information | |
|--|--------------------------------------|
| Product type designation | IPC677D |
| Display | |
| Design of display | 15" TFT multi-touch |
| Screen diagonal | 15 in |
| Resolution (pixels) | |
| • Horizontal image resolution | 1 366 Pixel |
| • Vertical image resolution | 768 Pixel |
| Backlighting | |
| • MTBF backlighting (at 25 °C) | 70 000 h |
| Control elements | |
| 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 |
| 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 | |
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| 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 | |
| <ul style="list-style-type: none"> • free slots | 2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer |
| <ul style="list-style-type: none"> • Number of PCI slots | 2 |
| <ul style="list-style-type: none"> • 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 | |
| <ul style="list-style-type: none"> • Graphics interface | 1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional) |
| Industrial Ethernet | |
| <ul style="list-style-type: none"> • Industrial Ethernet interface | Onboard, 2x 10 / 100 / 1000 Mbit, RJ45 |
| <ul style="list-style-type: none"> — 100 Mbps | Yes |

— 1000 Mbps

Yes

Interrupts/diagnostics/status information

Bus diagnostics

Yes

Integrated Functions

Monitoring functions

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|-----------------------------------|----------|
| • Temperature monitoring | Yes |
| • Watchdog | Yes |
| • Status LEDs | Yes |
| • Fan | Yes |
| • Monitoring function via network | Optional |

EMC

Interference immunity against discharge of static electricity

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|---|--|
| • 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 |
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Interference immunity against high-frequency electromagnetic fields

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| • 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 |
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Interference immunity to cable-borne interference

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| • 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

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| • 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

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| • Interference immunity to magnetic fields at 50 Hz | 100 A/m; to IEC 61000-4-8 |
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Emission of conducted and non-conducted interference

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| • Interference emission via line/AC current cables | EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A |
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Degree and class of protection

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|-------------------|------|
| IP (at the front) | IP65 |
| IP (rear) | IP20 |

Standards, approvals, certificates

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| CE mark | Yes |
| UL approval | Yes |
| • UL 508 | Yes |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |

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| KC approval | Yes |
| FCC | Yes |
| EMC | CE, EN 61000-6-4:2007, EN 61000-6-2:2005 |

Ambient conditions

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| 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 ² (1g) |
| Shock testing | |
| • Shock load during operation | Tested to DIN IEC 60068-2-29: 50 m/s ² (5 g), 30 ms, 100 shocks |

Operating systems

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| 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 |
| 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; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI |

Software

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| SIMATIC Software | Optional package with SIMATIC WinCC or WinAC RTX |
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Dimensions

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| Width of the housing front | 416.5 mm |
| Height of housing front | 298 mm |
| Overall depth | |
| • additional mounting depth (optical drive) | 26 mm |
| Mounting cutout/device depth (W x H x T) | 399 mm x 280 mm x 112 mm |

Weights

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| Panel PC in central design, approx. | 12 kg |
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last modified: 06/19/2019