

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" Multitouch (1920x 1080) XEON E3-1268LV3 (4C/8T, 2.3 (3.3) GHz, 8 MB cache VT-D, AMT) Solid-state drive 240 GB 16 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it) without expansion (software) 24 V DC industrial Power supply

### General information

|                          |         |
|--------------------------|---------|
| Product type designation | IPC677D |
|--------------------------|---------|

### Display

|                   |                     |
|-------------------|---------------------|
| Design of display | 22" TFT multi-touch |
|-------------------|---------------------|

|                 |       |
|-----------------|-------|
| Screen diagonal | 22 in |
|-----------------|-------|

#### Resolution (pixels)

- |  |                            |
|--|----------------------------|
| <ul style="list-style-type: none"> <li>Horizontal image resolution</li> <li>Vertical image resolution</li> </ul> | 1 920 Pixel<br>1 080 Pixel |
|--|----------------------------|

#### Backlighting

- |  |          |
|--|----------|
| <ul style="list-style-type: none"> <li>MTBF backlighting (at 25 °C)</li> </ul> | 30 000 h |
|--|----------|

### Control elements

#### Touch operation

- |  |                            |
|--|----------------------------|
| <ul style="list-style-type: none"> <li>Design as multi-touch screen</li> </ul> | Yes; Projective-capacitive |
|--|----------------------------|

### Installation type/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

- |  |            |
|--|------------|
| <ul style="list-style-type: none"> <li>Rated value 50 Hz</li> <li>Rated value 60 Hz</li> </ul> | Yes<br>Yes |
|--|------------|

#### Mains buffering

- |  |       |
|--|-------|
| <ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul> | 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 / 1000 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 |

### Ambient conditions

|  |   |
|--|---|
| Ambient temperature during operation   |   |
| <ul style="list-style-type: none"> <li>Ambient temperature during operation</li> </ul> | +5 °C to +45 °C with full configuration |
| Ambient temperature during storage/transportation                                      |   |
| <ul style="list-style-type: none"> <li>min.</li> </ul>                                 | -20 °C                                  |
| <ul style="list-style-type: none"> <li>max.</li> </ul>                                 | 60 °C                                   |

### Operating systems

|   |  |
|---|--|
| 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  |  |
| <ul style="list-style-type: none"> <li>Windows 7</li> </ul>             | Yes; Ultimate 32 bit or 64 bit   |
| <ul style="list-style-type: none"> <li>Windows 10 Enterprise</li> </ul> | Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  |

### Dimensions

|   |                          |
|---|--------------------------|
| Width of the housing front  | 560 mm                   |
| Height of housing front   | 380 mm                   |
| Overall depth   |                          |
| <ul style="list-style-type: none"> <li>additional mounting depth (optical drive)</li> </ul> | 26 mm                    |
| Mounting cutout/device depth (W x H x T)  | 542 mm x 362 mm x 112 mm |

### Weights

|                                     |            |
|-------------------------------------|------------|
| Panel PC in central design, approx. | 16 kg      |
| <b>last modified:</b>               | 02/13/2020 |