

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" Touch (1280x 800); with front USB Celeron G1820TE (2C/2T, 2.2 GHz, 2 MB cache) 500 GB HDD SATA; DVD +/-RW; 2 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) without operating system without expansion (software) 24 V DC industrial Power supply

General information

Product type designation IPC677D

Display

Design of display 15" TFT touch

Screen diagonal 15 in

Resolution (pixels)

- Horizontal image resolution 1 280 Pixel
- Vertical image resolution 800 Pixel

Backlighting

- MTBF backlighting (at 25 °C) 80 000 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 ≥ 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	
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 PCI 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	
• 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

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

SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX
------------------	--

Dimensions

Width of the housing front	415 mm
Height of housing front	310 mm
Overall depth	
• additional mounting depth (optical drive)	26 mm
Mounting cutout/device depth (W x H x T)	396 mm x 291 mm x 112 mm

Weights

Panel PC in central design, approx.	12 kg
-------------------------------------	-------

last modified: 09/17/2019