## **SIEMENS**

## Data sheet 6AV7260-1JH60-1BA6

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); PROFINET (IRT, 3 ports, CP 1616-compatible); 2 MB buffered SRAM RAID1 2x 320 GB SATA (2.5"); DVD +/-RW 16 GB DDR3 1600 DIMM; ECC; 2x PCI 2x USB additive (1 slot occupied) Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it) SIMATIC IPC DiagMonitor enclosed 24 V DC industrial Power supply

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
<ul> <li>Vertical image resolution</li> </ul>	768 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h
Control elements	
Input device	
<ul><li>Mouse, at front</li></ul>	Front USB 2.0 (500mA)
Touch operation	
<ul> <li>Design as touch screen</li> </ul>	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	
<ul> <li>Rated value 50 Hz</li> </ul>	Yes
Rated value 60 Hz	Yes
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	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	
Type of memory	DDR3-1600 DIMM
Main memory	2 / 4 / 8 / 16 GB; ECC optional

Canacity of main mamony may	16 Chyto
Capacity of main memory, max.  Data areas and their retentivity	16 Gbyte
Retentive data area (incl. timers, counters, flags), max.	2 Mbyte; 128 KB can be stored in the buffer time; optional
Hardware configuration	2 Mbyte, 126 KB can be stored in the buller time, optional
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     Monitoring function via network	Yes Optional
Monitoring function via network  EMC	Ориона
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC
electricity	61000-4-2
Interference immunity against high-frequency electromagnetic fields	S
<ul> <li>Interference immunity against high frequency radiation</li> </ul>	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
<ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>	±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	
interiered infinitity against voltage surge	
asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
	±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric
asymmetric interference	
asymmetric interference     symmetric interference	
<ul> <li>asymmetric interference</li> <li>symmetric interference</li> </ul> Interference immunity to magnetic fields	±1 kV acc. to IEC 61000-4-5, surge symmetric
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz	±1 kV acc. to IEC 61000-4-5, surge symmetric
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz     Emission of conducted and non-conducted interference	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz     Emission of conducted and non-conducted interference     Interference emission via line/AC current cables	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz     Emission of conducted and non-conducted interference     Interference emission via line/AC current cables  Degree and class of protection	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8  EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz     Emission of conducted and non-conducted interference     Interference emission via line/AC current cables  Degree and class of protection  IP (at the front)	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8  EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz     Emission of conducted and non-conducted interference     Interference emission via line/AC current cables     Degree and class of protection  IP (at the front)  IP (rear)	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8  EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz     Emission of conducted and non-conducted interference     Interference emission via line/AC current cables     Degree and class of protection     IP (at the front)     IP (rear)     Standards, approvals, certificates	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8  EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A  IP65 IP20
asymmetric interference     symmetric interference     Interference immunity to magnetic fields     Interference immunity to magnetic fields at 50 Hz     Emission of conducted and non-conducted interference     Interference emission via line/AC current cables     Degree and class of protection     IP (at the front)     IP (rear)     Standards, approvals, certificates     CE mark	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8  EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A  IP65 IP20  Yes
asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables  Degree and class of protection IP (at the front) IP (rear)  Standards, approvals, certificates  CE mark UL approval UL 508  cULus	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8  EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A  IP65 IP20  Yes Yes Yes Yes
asymmetric interference symmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables  Degree and class of protection IP (at the front) IP (rear)  Standards, approvals, certificates  CE mark  UL approval UL 508	±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8  EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A  IP65 IP20  Yes Yes Yes

FCC	Yes
EMC	CE, EN 61000-6-4:2007, EN 61000-6-2:2005
Ambient conditions	
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 $^{\circ}\text{C}$ (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 $^2$ (1 g)
Shock testing	
<ul> <li>Shock load during operation</li> </ul>	Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks
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><li>Windows 7</li></ul>	Yes; Ultimate 32 bit or 64 bit
<ul> <li>Windows 10 Enterprise</li> </ul>	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	483 mm
Height of housing front	337 mm
Mounting cutout, width	465 mm
Mounting cutout, height	319 mm
Overall depth	112 mm
<ul> <li>additional mounting depth (optical drive)</li> </ul>	26 mm
Weights	
Weight, approx.	14 kg

last modified: 6/25/2021 **2**