## **SIEMENS**

## **Data sheet**

## 6AV7260-0BB20-1AC3

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); PROFIBUS/MPI (CP 5622-compatible); 2 MB buffered SRAM 500 GB HDD SATA; DVD +/-RW; 4 GB DDR3 1600 DIMM; 2x PCI 2x USB additive (1 slot occupied) Windows 7 Ultimate 32 bit SP1, MUI (de, en, fr, es, it) SIMATIC IPC DiagMonitor and Image&Partition Creator enclosed AC 110/230V industrial power supply unit with NAMUR; Power supply cable USA

General information	
Product type designation	IPC677D
Display	
Design of display	15" TFT touch
Screen diagonal	15 in
Resolution (pixels)	
<ul> <li>Horizontal image resolution</li> </ul>	1 280 pixel
Vertical image resolution	800 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	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	
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	2 mbyte, 120 NB can be closed in the banks ame, 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 / 1 000 Mbit, RJ45
— 100 Mbps	Yes
— 1000 Mbps	Yes
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	
<ul> <li>Temperature monitoring</li> </ul>	Yes
<ul><li>Watchdog</li></ul>	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  • Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2
Interference immunity against discharge of static electricity  • Interference immunity against discharge of static electricity	61000-4-2
Interference immunity against discharge of static electricity  • Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields	61000-4-2
Interference immunity against discharge of static electricity  • Interference immunity against discharge of static electricity	61000-4-2
Interference immunity against discharge of static electricity  • Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields	61000-4-2 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,
Interference immunity against discharge of static electricity  • Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  • Interference immunity against high frequency radiation	61000-4-2  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  ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge
Interference immunity against discharge of static electricity  • Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  • Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  • Interference immunity on supply cables	61000-4-2  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  ±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 against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m	61000-4-2  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  ±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, length > 30 m
Interference immunity against discharge of static electricity  • Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  • Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  • Interference immunity on supply cables	61000-4-2  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  ±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 against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4;
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4;
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±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 discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables > 30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  asymmetric interference	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  asymmetric interference  symmetric interference	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  asymmetric interference  symmetric interference  Interference immunity to magnetic fields	61000-4-2  S  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  asymmetric interference symmetric interference Interference immunity to magnetic fields  Interference immunity to magnetic fields at 50 Hz	61000-4-2  S  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  asymmetric interference  symmetric interference  Interference immunity to magnetic fields  Interference immunity to magnetic fields at 50 Hz  Emission of conducted and non-conducted interference	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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	61000-4-2  S  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m  ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric  ±1 kV acc. to IEC 61000-4-5, surge symmetric  100 A/m; to IEC 61000-4-8
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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)	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric  ±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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)	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric  ±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m  ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m  ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m  ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fields  Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  Interference immunity on supply cables  Interference immunity on signal cables >30m  Interference immunity on signal cables < 30m  Interference immunity against voltage surge  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	61000-4-2  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  ±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric  ±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

EMC Ambient temperature during operation  • min. • max. 45 °C Ambient temperature during storage/transportation  • min. • max. 45 °C Ambient temperature during storage/transportation  • min. • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Relative humidity • Vibration resistance during operation acc. to IEC 60068- 2-6 Shock testing • Shock load during operation • Shock load during operation • Shock load for gystem  pre-installed operating system  pre-installed operating system • Windows 7 • Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Width of the housing front Height of housing front Housing to Housing front Housing tront Housing tront Housing to Housing front Housing tront Housing tront Housing tront Housing trout, width Housing trout, additional mounting depth (optical drive) Weight, approx.  12 kg  Housing temperature during operation  5 °C  C C  C C  C C  C C  C C  C C  C	FCC	Yes	
Ambient temperature during operation  • min. • max. 45 °C  Ambient temperature during storage/transportation  • min. • max. 60 °C  Relative humidity • Relative humidity • Relative humidity • Relative humidity • Relative humidity  • Vibrations • Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 2-6  Shock testing • Shock load during operation • Tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g)  Shock load during operation  Tested to DIN IEC 60068-2-29: 50 m/s² (6 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  • Windows 7 Yes; Ultimate 32 bit or 64 bit • Windows 10 Enterprise  SliMATIC Software  Optional package with SiMATIC WinCC or WinAC RTX  Dimensions  Width of the housing front  Height of housing front  Height of housing front  Height of housing front  Mounting cutout, width  396 mm  Mounting cutout, width  4 additional mounting depth (optical drive)  Weights	EMC	CE, EN 61000-6-4:2007, EN 61000-6-2:2005	
<ul> <li>• min.</li> <li>• max.</li> <li>Ambient temperature during storage/transportation</li> <li>• min.</li> <li>• max.</li> <li>• 60 °C</li> <li>Relative humidity</li> <li>• Relative humidity</li> <li>• Relative humidity</li> <li>• Relative humidity</li> <li>• North tested according to IEC 60068-2-78, IEC 60068-2-30; 5% to 80% at 25 °C (no condensation)</li> <li>Vibrations</li> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> <li>• Shock lesting</li> <li>• Shock load during operation</li> <li>• Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks</li> </ul> Operating systems <ul> <li>pre-installed operating system</li> <li>• Windows 7 Ves; Ultimate 32-bit/of 4-bit, MUI; Windows Embedded Standard 7 P, 32-bit/, MUI; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI</li> </ul> Software <ul> <li>• Windows 10 Enterprise</li> <li>• Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI</li> </ul> Software <ul> <li>Software</li> <li>Optional package with SIMATIC WinCC or WinAC RTX</li> </ul> Dimensions Width of the housing front <ul> <li>415 mm</li> <li>Height of housing front</li> <li>Height of housing front</li> <li>415 mm</li> <li>Mounting cutout, width</li> <li>396 mm</li> <li>Mounting cutout, height</li> <li>291 mm</li> <li>Overall depth</li> <li>additional mounting depth (optical drive)</li> <li>26 mm</li> </ul>	Ambient conditions		
max. 45 °C  Ambient temperature during storage/transportation	Ambient temperature during operation		
Ambient temperature during storage/transportation  • min.  • max.  60 °C  Relative humidity  • Siver humidity  • Vibrations  • Vibration resistance during operation acc. to IEC 60068-2-6 2-6  Shock load during operation  • Windows 7  • Windows 7  • Windows 7  • 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  • Windows 7  • Windows 7  • Windows 10 Enterprise  • Windows 10 Enterprise  Software  SIMATIC Software  Width of the housing front  Height of housing front  Mounting cutout, width  Mounting cutout, height  • additional mounting depth (optical drive)  Weights  Width of the housing depth (optical drive)  • additional mounting depth (optical drive)  Weights	• min.	5 °C	
<ul> <li>• min.</li> <li>• max.</li> <li>60 °C</li> <li>Relative humidity</li> <li>• Relative humidity</li> <li>• Relative humidity</li> <li>• Relative humidity</li> <li>• Relative humidity</li> <li>• Vibrations</li> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> <li>2-6</li> <li>Shock testing</li> <li>• Shock load during operation</li> <li>• Shock load during operation</li> <li>• Shock load during operation</li> <li>• Shock load during system</li> <li>• Windows 7 Ultimate, 32-bit/64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI operating system</li> <li>• Windows 7 Ultimate, 32-bit/64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI operating system</li> <li>• Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI</li> <li>• Windows 10 Enterprise</li> <li>• Windows 10 Enterprise</li> <li>• Software</li> <li>Software</li> <li>Software</li> <li>Optional package with SIMATIC WinCC or WinAC RTX</li> <li>Dimensions</li> <li>Width of the housing front</li> <li>Height of housing front</li> <li>Height of housing front</li> <li>Mounting cutout, width</li> <li>• additional mounting depth (optical drive)</li> <li>Weights</li> </ul>	• max.	45 °C	
Max.   60 °C	Ambient temperature during storage/transportation		
Relative humidity  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  2-6  Shock testing  Shock load during operation  Tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g)  Shock load during operation  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  Windows 7  Yes; Ultimate 32 bit or 64 bit  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  Height of housing front  415 mm  Mounting cutout, width  396 mm  Mounting cutout, width  Auditional mounting depth (optical drive)  Weights	• min.	-20 °C	
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 2-6  Shock lesting  Shock load during operation  Tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g)  Shock load during operation  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  Ves  Ves; Ultimate 32 bit or 64 bit 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 Height of housing front Height of housing front Mounting cutout, width Mounting cutout, width Mounting cutout, height Overall depth Additional mounting depth (optical drive)  Weights	• max.	60 °C	
Vibrations  Vibration resistance during operation acc. to IEC 60068-2-6  Shock testing  Shock load during operation  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  Windows 7  Yes; Ultimate 32 bit or 64 bit  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  Height of housing front  Mounting cutout, width  Mounting cutout, height  Overall depth  additional mounting depth (optical drive)  Weights	Relative humidity		
Vibration resistance during operation acc. to IEC 60068-2-6 2-6 Shock testing     Shock load during operation     Shock load during operation     Tested to DIN IEC 60068-2-9: 50 m/s² (5 g), 30 ms, 100 shocks  Operating systems  pre-installed operating system     Yes  pre-installed operating system     Yes  pre-installed operating system     Yes; Ultimate 32 bit or 64 bit     • Windows 7	Relative humidity		
2-6	Vibrations		
Shock load during operation  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  Windows 7  Windows 10 Enterprise  SIMATIC Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Width of the housing front  Height of housing front  Mounting cutout, width  Mounting cutout, width  Mounting cutout, height  Overall depth  additional mounting depth (optical drive)  Weights			
Operating systems       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       Yes; Ultimate 32 bit or 64 bit         • Windows 7       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         Mounting cutout, width       396 mm         Mounting cutout, height       291 mm         Overall depth       112 mm         • additional mounting depth (optical drive)       26 mm         Weights	Shock testing		
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  Windows 7  Yes; Ultimate 32 bit or 64 bit  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  Height of housing front  Mounting cutout, width  396 mm  Mounting cutout, height  Overall depth  • additional mounting depth (optical drive)  Weights	<ul> <li>Shock load during operation</li> </ul>	Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks	
bit, MUI; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  without operating system  • Windows 7  • Windows 10 Enterprise  Yes; Ultimate 32 bit or 64 bit  • 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  Height of housing front  Mounting cutout, width  Mounting cutout, height  Overall depth  • additional mounting depth (optical drive)  Weights	Operating systems		
pre-installed operating system	pre-installed operating system		
Windows 7 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 Height of housing front Mounting cutout, width Mounting cutout, height Overall depth additional mounting depth (optical drive)  Weights  Yes; Ultimate 32 bit or 64 bit Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software And Simatic	without operating system	Yes	
● Windows 10 Enterprise  Software  SIMATIC Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Width of the housing front Height of housing front Mounting cutout, width Mounting cutout, height Overall depth ● additional mounting depth (optical drive)  Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI  Software  Optional package with SIMATIC WinCC or WinAC RTX  ### 15 mm  ### 310 mm  ### 291 mm  Overall depth ● additional mounting depth (optical drive)  ### 26 mm  Weights	pre-installed operating system		
Software  SIMATIC Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Width of the housing front  Height of housing front  Mounting cutout, width  Mounting cutout, height  Overall depth  • additional mounting depth (optical drive)  Weights  Optional package with SIMATIC WinCC or WinAC RTX  415 mm  310 mm  415 mm  329 mm  112 mm  • additional mounting depth (optical drive)	<ul><li>Windows 7</li></ul>	Yes; Ultimate 32 bit or 64 bit	
SIMATIC Software  Optional package with SIMATIC WinCC or WinAC RTX  Dimensions  Width of the housing front 415 mm  Height of housing front 310 mm  Mounting cutout, width 396 mm  Mounting cutout, height 291 mm  Overall depth 112 mm  • additional mounting depth (optical drive) 26 mm  Weights	<ul> <li>Windows 10 Enterprise</li> </ul>	Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI	
Dimensions   Width of the housing front 415 mm   Height of housing front 310 mm   Mounting cutout, width 396 mm   Mounting cutout, height 291 mm   Overall depth 112 mm   ● additional mounting depth (optical drive) 26 mm   Weights	Software		
Width of the housing front  Height of housing front  Mounting cutout, width  Mounting cutout, height  Overall depth  additional mounting depth (optical drive)  Weights  415 mm  310 mm  329 mm  291 mm  112 mm  26 mm	SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX	
Height of housing front  Mounting cutout, width  Mounting cutout, height  291 mm  Overall depth  • additional mounting depth (optical drive)  Weights	Dimensions		
Mounting cutout, width  Mounting cutout, height  291 mm  Overall depth  additional mounting depth (optical drive)  Weights  396 mm  291 mm  112 mm  26 mm	Width of the housing front	415 mm	
Mounting cutout, height  Overall depth  additional mounting depth (optical drive)  Weights  291 mm  112 mm  26 mm	Height of housing front	310 mm	
Overall depth  • additional mounting depth (optical drive)  Weights  112 mm  26 mm	Mounting cutout, width	396 mm	
additional mounting depth (optical drive)  Weights  26 mm	Mounting cutout, height	291 mm	
Weights	Overall depth	112 mm	
	<ul> <li>additional mounting depth (optical drive)</li> </ul>	26 mm	
Weight, approx. 12 kg	Weights		
	Weight, approx.	12 kg	

last modified:

1/31/2021