## **SIEMENS**

## **Data sheet**

## 6AV7260-1GG30-0AX6

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) RAID1 2x 320 GB SATA (2.5") 8 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) Windows 7 Ultimate 32 bit SP1, MUI (de, en, fr, es, it) without expansion (software) 24 V DC industrial Power supply

Design of display	General information	
Design of display	Product type designation	IPC677D
Screen diagonal   19 in	Display	
Nesolution (pixels)	Design of display	19" TFT touch
Horizontal image resolution     Vertical image resistive     Vertical im	Screen diagonal	19 in
### Seaklighting  **MTBF* backlighting (at 25 °C)	Resolution (pixels)	
Auto-	Horizontal image resolution	1 366 pixel
• MTBF backlighting (at 25 °C) 50 000 h  Control elements    Pront USB 2.0 (500mA)	<ul> <li>Vertical image resolution</li> </ul>	768 pixel
Input device	Backlighting	
Input device  • Mouse, at front  Touch operation  • Design as touch screen  Mounting  Mounting  Mounting  Panel PC, built-in unit  restrict design  Mounting in portreit format possible  maximum permissible installation angle +/-  Supply voltage  Type of supply voltage  Line frequency  • Rated value 60 Hz  • Mains buffering  • Mains/voltage failure stored energy time  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)  Craphic  Graphic  Optical drives  Optical drives  Optical drives  Optical drives  Prose Supply  Operation  Optical drives  Optical drives  Optical memory  Memory  Memory  Memory  DDR3-1600 DilMM  Memory  Memory  DDR3-1600 DilMM  Memory  Mel memory  DDR3-1600 DilMM  Memory  Mel memory  DDR3-1600 DilMM  Memory  Mel memory  Por persistre  Proces (Coptional)  Front USB 2.0 (500mA)  For horizontal and vertical mounting  Proses institute and vertical mounting  Prosistre  For horizontal and vertical mounting  Prosistre  Prosessor 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 HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller Celeron)  Drives  Optical drives  Optical drives  Optical drives  DVD4R4RW combi-drive, optional  Ammory  Yes; ≥ 240 GB optional	MTBF backlighting (at 25 °C)	50 000 h
• Mouse, at front         Front USB 2.0 (500mA)           Touch operation           • Design as touch screen         Yes; analog, resistive           Installation type/mounting         For horizontal and vertical 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         100/240 V AC (autorange); 24 V DC           Line frequency         Yes           * Rated value 50 Hz         Yes           * Rated value 60 Hz         Yes           * Mains buffering         10 ms           * Mains buffering         10 ms           * Mains buffering         155 W           * Processor         ***           * In full configuration         155 W           * 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           **Craphic         ***           **Graphic controller         ***         ***         ***         ***         ***	Control elements	
Touch operation	Input device	
► Design as touch screen   Yes; analog, resistive	Mouse, at front	Front USB 2.0 (500mA)
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 +/-  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 15 € W  Processor  Processor Vye  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 HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron)  Processor  Processor Vye  Chical drives DVD2R±RW combi-drive, optional  Hard disk 3,5° SATA ≥ 500 GB, optional: 3,5° SATA ≥ 1 TB; 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  Polical formation and vertical mounting  Yes were supplied and vertical mounting in the controller optional  Panel PC, built-in unit  Yes were supplied and vertical mounting in the colosure are vibration-damped; RAID1 2x 2.5° SATA ≥ 320 GB byte in removable drive bay  Memory  DDR3-1600 DIMM  Main memory DDR3-1600 DIMM  Main memory DDR3-1600 DIMM	Touch operation	
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     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     Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron)       Drivos     DVD±R±RW combi-drive, optional       Hard disk     3.5" SATA ≥ 500 GB, optional: 3.5" SATA ≥ 320 GB byte in removable drive by bay       SSD     Yes; ≥ 240 GB optional       Memory     DDR3-1600 DIMM       Main memory     2 / 4 / 8 / 16 GB; ECC optional	Design as touch screen	Yes; analog, resistive
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     Yes       • Rated value 50 Hz     Yes       • Rated value 60 Hz     Yes       Mains buffering     10 ms       • Namis/voltage failure stored energy time     10 ms       Power loss     155 W       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     Intel DB82C226 PCH       Graphics controller     Intel D graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron)       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 byte in removable drive bay       SSD     Yes; ≥ 240 GB optional       Memory     DDR3-1600 DIMM       Main memory     2/4/8/16 GB; ECC optional	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     Yes       • Rated value 50 Hz     Yes       • Rated value 60 Hz     Yes       Mains buffering     10 ms       • Namisvoltage failure stored energy time     10 ms       Power loss       In full configuration     155 W       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       Intel D 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 byte in removable drive bay       SSD     Yes; ≥ 240 GB optional       Memory     DDR3-1600 DIMM       Main memory     2/4/8/16 GB; ECC optional	Mounting	For horizontal and vertical mounting
Mounting in portrait format possible 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 Rated value 60 Hz  Mains buffering  Mains/voltage failure stored energy time  10 ms  Power loss  In full configuration  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  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  Ves; ≥ 240 GB optional  Memory  Type of memory  DDR3-1600 DIMM  Main memory  2 / 4 / 8 / 16 GB; ECC optional	Design	Panel PC, built-in unit
maximum permissible installation angle +/- 20°  Supply voltage  Type of supply voltage 100/240 V AC (autorange); 24 V DC  Line frequency  Pated value 50 Hz Yes Alard 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	central design	Yes
Type of supply voltage  Type of supply voltage  Line frequency	Mounting in portrait format possible	Yes
Type of supply voltage  Line frequency  • Rated value 50 Hz • Rated value 60 Hz  **Rated value 60 Hz  **Amins buffering  • Mains Notltage failure stored energy time  10 ms  **Power loss  In full configuration  **Processor**  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  Graphic  Graphic  Graphic scontroller  Optical drives  Dyber**  Dyber**  Dyber**  Dyber**  Dyber**  Dyber**  Dyber**  SSD  Yes; ≥ 240 GB optional  Memory  DDR3-1600 DIMM  Main memory  DDR3-1600 DIMM  Main memory  DR3-1600 DIMM  Main memory  DR3-1600 DIMM  Main memory  Amin was a specific of the controller specific and the controller specific	maximum permissible installation angle +/-	20°
Line frequency  • Rated value 50 Hz  • Rated value 60 Hz  Yes  Mains buffering  • Mains/voltage failure stored energy time  10 ms  Power loss  In full configuration  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 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	Supply voltage	
• Rated value 50 Hz • 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  Graphic  Graphic  Graphics controller  Optical drives  Optical drives  DVD±R±RW combi-drive, optional  Hard disk  3.5" SATA ≥ 300 GB, optional: 3.5" SATA ≥ 310 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  DDR3-1600 DIMM  Main memory  2 / 4 / 8 / 16 GB; ECC optional		100/240 V AC (autorange); 24 V DC
• Rated value 60 Hz  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  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  As" SATA ≥ 10 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	Line frequency	
Mains buffering  Mains/voltage failure stored energy time  Power loss  In full configuration  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  Graphic  Graphic 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  DDR3-1600 DIMM  Main memory	Rated value 50 Hz	Yes
• Mains/voltage failure stored energy time  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  Graphic  Graphic Sontroller  Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron)  Drives  Optical drives  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 by  SSD  Yes; ≥ 240 GB optional  Memory  Type of memory  DDR3-1600 DIMM  Main memory  2 / 4 / 8 / 16 GB; ECC optional	Rated value 60 Hz	Yes
In full configuration  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  Graphic  Graphic 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  DDR3-1600 DIMM  Main memory	Mains buffering	
In full configuration   155 W   Processor	Mains/voltage failure stored energy time	10 ms
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  Graphic 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	Power loss	
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	In full configuration	155 W
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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	Chipset	Intel DH82C226 PCH
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       DDR3-1600 DIMM         Main memory       2 / 4 / 8 / 16 GB; ECC optional	Graphic	
Optical drives       DVD±R±RW combi-drive, optional         Hard disk $3.5$ " SATA $\geq 500$ GB, optional: $3.5$ " SATA $\geq 1$ TB; RAID1 2x 2.5" SATA $\geq 320$ GB; solid-state drive (SSD) $\geq 240$ GB; all hard disk drives within the enclosure are vibration-damped; RAID1 2x 2.5" SATA $\geq 320$ GB byte in removable drive bay         SSD       Yes; $\geq 240$ GB optional         Memory       DDR3-1600 DIMM         Main memory $2/4/8/16$ GB; ECC optional	Graphics controller	
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	Drives	
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	Optical drives	DVD±R±RW combi-drive, optional
Memory           Type of memory         DDR3-1600 DIMM           Main memory         2 / 4 / 8 / 16 GB; ECC optional	Hard disk	GB; solid-state drive (SSD) $\geq$ 240 GB; all hard disk drives within the enclosure are vibration-damped; RAID1 2x 2.5" SATA $\geq$ 320 GB byte in removable drive
Type of memory         DDR3-1600 DIMM           Main memory         2 / 4 / 8 / 16 GB; ECC optional	SSD	Yes; ≥ 240 GB optional
Main memory 2 / 4 / 8 / 16 GB; ECC optional	Memory	
	Type of memory	DDR3-1600 DIMM
Capacity of main memory, max. 16 Gbyte	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	
	±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	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 fit	61000-4-2 fields  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 fi  • Interference immunity against high frequency radiation	61000-4-2 fields  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 firest electronagnetic firest electricity  • Interference immunity against high frequency radiation	61000-4-2 fields  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 fir  • Interference immunity against high frequency radiation  Interference immunity to cable-borne interference  • Interference immunity on supply cables	61000-4-2 fields  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 fi  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 fields  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 fi  • 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 fields  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 fi  • 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 fields  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 fi  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  fields  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 fit  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  fields  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 fit  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 fields  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 fi  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 fields  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 fi  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 fields  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 fi  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 fields  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 fire.  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.	fields  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  ±1 kV acc. 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 file.  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)	fields  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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fi  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)	fields  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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fi  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	fields  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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic fire.  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	fields  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 61000-4-6  ±2 kV acc. to IEC 61000-4-5, surge asymmetric; ±2 kV acc. to IEC 61000-4-5, surge symmetric; ±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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic file.  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  cULus	61000-4-2 fields  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
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic file.  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  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  RCM (formerly C-TICK)	fields  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 Yes Yes Yes
Interference immunity against discharge of static electricity  Interference immunity against discharge of static electricity  Interference immunity against high-frequency electromagnetic file.  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  cULus	fields  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 Yes 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	
<ul> <li>Vibration resistance during operation acc. to IEC 60068- 2-6</li> </ul>	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 🖸