## SIEMENS

Data sheet	6AG4140-5BL04-0DA0
	SIMATIC IPC427D (Microbox PC), HD graphic onboard, 2x10/100/1000 Mbit/s Ethernet RJ45, 4xUSB V3.0 (high current), PCIe (optional), 24 V DC power supply Core I3-3217UE; 1x Gbit Ethernet (IE/PN); 1x PROFINET (IRT, 3 ports); DIN rail mounting; 4 GB with NVRAM; 1x RS-232; without PCIE; WIN Embedded Standard 7, 32-bit Replaceable without drive; CFast 8 GB; without SIMATIC software
Installation type/mounting	
Mounting	DIN rail, wall mounting, portrait mounting
Design	Box PC, built-in unit
Supply voltage	
Type of supply voltage	24 V DC
Processor	
Processor type	Celeron 827E (1C/1T, 1.40 GHz, 1.5 MB Cache); Core i3-3217UE (2C/4T, 1.60 GHz, 3 MB Cache); Core i7-3517UE (2C/4T, 1.70 (2.80) GHz, 4 MB Cache, iAMT)
Graphic	
Graphics controller	Intel HD Graphics, Intel HD Graphics 4000
Drives	
Hard disk	2.5" SATA ≥ 320 GB
SSD	Yes; 1x 240 GB SSD, 1x 480 GB SSD
Memory	
Type of memory	DDR3 SO-DIMM
Main memory	2 / 4 / 8 GB; ECC optional
Capacity of main memory, max.	8 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time; optional
Hardware configuration	
Slots	
● free slots	2x PCIe; optional: 1x PCIe (x4); 2x PCIe (x1, x4), with card retainer
Number of PCI slots	2; Optional
<ul> <li>Number of compact flash slots</li> </ul>	2; CFast
Interfaces	

PROFIBUS/MP1     optionally onboard, isolated, max. 12 Mbps, compatible with CP       5611     5611       Number of PROFINET interfaces     1; 3 ports (incl. switch)       USB port     4x USB 3.0       Connection for keyboard/mouse     USB / USB       serial interface     COM1: 1x RS 232, COM2 (optional): 1x RS 232       Video interfaces     1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)       Industrial Ethernet     Industrial Ethernet       • Industrial Ethernet interface     Yes       • Industrial Ethernet interface     Yes       • 100 Mbps     Yes       • 100 Mbps     Yes       • 100 Mbps     Yes       • Temperature monitoring     Yes       • Status LEDs     Yes       • Fan     No       • Monitoring function via network     Optional       Etter     Optional       Interference immunity against discharge of static electricity     1k V contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 2 - 2.7 GHz, 80% AM a			
USB port4x USB 3.0Connection for keyboard/mouseUSB / USBserial interfaceCOM1: 1x RS 232, COM2 (optional): 1x RS 232Video interfaces1 x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)Industrial Ethernet1 x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)Industrial Ethernet- 100 Mbps- 100 MbpsYes- 100 MbpsYesInterrupts/diagnostics/status informationBus diagnosticsYesIntegrated FunctionsYesValchdogYes• Temperature monitoringYes• Status LEDsYes• FanNo• Monitoring function via networkOptionalEtterrupts/display function via networkOptionalEtterrupts/display function via networkIt for a construction construction construction construction construction construction via networkInterference immunity against discharge of static electrictiv±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8	PROFIBUS/MPI	optionally onboard, isolated, max. 12 Mbps, compatible with CP 5611	
Connection for keyboard/mouseUSB / USBserial interfaceCOM1: 1x RS 232, COM2 (optional): 1x RS 232Video interfaces1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)Industrial Ethernet1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)Industrial Ethernet- 100 Mbps- 100 MbpsYes- 100 MbpsYes- 100 MbpsYesInterrupts/diagnostics/status informationBus diagnosticsYesIntegrated FunctionsMonitoring functions- Temperature monitoringYes• Status LEDsYes• Status LEDsYes• FanNo• Monitoring function via networkOptionalEterrupts/display function via networkOptionalEterrupts/display function via networkOptionalInterference 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; ±8 kV air discharge acc. to IEC 61000-4-3; 10 V/m for 80 - 1 00 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 1 00 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 1 00 KHz e 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.27 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.27 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.27 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.07 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.07 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.07 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.07 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 - 2.07 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 8.0 MHz, 80% AM acc. to IEC 61000-4-3	Number of PROFINET interfaces	1; 3 ports (incl. switch)	
serial interfaceCOM1: 1x RS 232, COM2 (optional): 1x RS 232Video interfaces1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)Industrial Ethernet1 x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)Industrial Ethernet- 100 Mbps- 100 MbpsYes- 100 MbpsYes- 100 MbpsYesInterrupts/diagnostics/status informationBus diagnosticsYesIntegrated FunctionsVesVariationsVes• Temperature monitoring • Vas• Status LEDs• Fan• Monitoring function via networkEtherence immunity against discharge of static electricity• Interference immunity against discharge of static electricity• Interference immunity against discharge of static electricits• Interference immunity against discharge of static electricits• Interference immunity against high-frequency electrometric fields• Interference immunity against high frequency radiation• Ovim for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 6 1000-4 - 3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 6 1000-4 - 3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 6 1000-4 - 3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 6 1000-4 - 3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 6 1000-4 - 3; 10 V/m for 10 kHz - 80 MHz, 80% AM acc. to I	USB port		
Video interfaces       1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)         Industrial Ethernet       1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)         Industrial Ethernet       100 Mbps         100 Mbps       Yes         - 100 Mbps       Yes         - 100 Mbps       Yes         Interrupts/diagnostics/status information       Yes         Eus diagnostics       Yes         Interrupts/diagnostics/status information       Yes         Eus diagnostics       Yes         Interrupts/diagnostics/status information       Yes         Eus diagnostics       Yes         Interrupts/diagnostics/status information       Yes         Status LEDs       Yes         • Status LEDs       Yes         • Fan       No         • Monitoring function via network       Optional         EtC       Interference immunity against discharge of static electricity         • Interference immunity against discharge of static electricity       ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to	Connection for keyboard/mouse	USB / USB	
• Graphics interface1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)Industrial Ethernet• Industrial Ethernet interface• 100 MbpsYes• 1000 MbpsYes• 1000 MbpsYesInterrupts/diagnostics/status informationBus diagnostics/status informationBus diagnosticsYesIntegrated FunctionsIntegrated Functions• Temperature monitoringYes• Temperature monitoringYes• Status LEDsYes• Status LEDsYes• FanNo• Monitoring function via networkOptionalInterference immunity against discharge of static electricitydischarge acc. to IEC 61000-4-2; ±8 kV air discharge 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	serial interface	COM1: 1x RS 232, COM2 (optional): 1x RS 232	
Industrial Ethernet         Industrial Ethernet interface         - 100 Mbps         Yes         - 1000 Mbps         Yes         Interrupts/diagnostics/status information         Bus diagnostics       Yes         Integrated Functions         Integrated Functions         Value       Yes         Nonitoring functions       Yes         • Temperature monitoring       Yes         • Watchdog       Yes         • Status LEDs       Yes         • Fan       No         • Monitoring function via network       Optional         EMC       Interference immunity against discharge of static electricity         Interference immunity against discharge of static electricity       ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-3; ±0 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC	Video interfaces		
• Industrial Ethernet interfaceYes- 100 MbpsYesInterrupts/diagnostics/status informationYesBus diagnosticsYesIntegrated FunctionsYesMonitoring functionsYes• Temperature monitoringYes• Temperature monitoringYes• Status LEDsYes• Status LEDsYes• FanNo• Monitoring function via networkOptionalEmeterInterference immunity against discharge of static electricity• Interference immunity against discharge of static electricity±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±0 kV air discharge acc. to IEC 61000-4-3; ±0 kV air discharge acc.	•	1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)	
- 100 MbpsYes- 1000 MbpsYesInterrupts/diagnostics/status informationBus diagnosticsYesIntegrated FunctionsMonitoring functionsIntegrated FunctionsMonitoring functions• Temperature monitoringYes• WatchdogYes• Status LEDsYes• FanNo• Monitoring function via networkOptionalEMCInterference immunity against discharge of static electricity• Interference immunity against discharge of static electricity86 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC	Industrial Ethernet		
Hore mapsYesInterropts/diagnostics/status informationBus diagnosticsYesIntegrated FunctionsIntegrated Function via networkInterference immunity against discharge of static electricityInterference immunity against discharge of static electricityInterference immunity against high-frequency electrometric fieldsInterference immunity against high frequency radiationInterference immunity against high frequencyInterference immunity against high frequencyInterferenc	<ul> <li>Industrial Ethernet interface</li> </ul>		
Interrupts/diagnostics/status information         Bus diagnostics       Yes         Integrated Functions       Integrated Functions         Monitoring functions       Yes         • Temperature monitoring       Yes         • Watchdog       Yes         • Status LEDs       Yes         • Fan       No         • Monitoring function via network       Optional         EMC         Interference immunity against discharge of static elect/city         • Interference immunity against discharge of static elect/city       ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6	— 100 Mbps	Yes	
Bus diagnostics       Yes         Integrated Functions         Monitoring functions       Yes         • Temperature monitoring       Yes         • Watchdog       Yes         • Watchdog       Yes         • Status LEDs       Yes         • Fan       No         • Monitoring function via network       Optional         EMC         Interference immunity against discharge of static electricity         • Interference immunity against discharge of static electricity       ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2         Interference immunity against high-frequency electromage acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-3; discharge acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6	— 1000 Mbps	Yes	
Integrated FunctionsMonitoring functions• Temperature monitoringYes• WatchdogYes• Status LEDsYes• FanNo• Monitoring function via networkOptionalEMCInterference immunity against discharge of static electricity• Interference immunity against discharge of static electricity±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-3; ±8 kV air discharge acc. to IEC 61000-4-3; ±8 kV air discharge acc. to IEC 61000-4-4; ±8 kV air			
Monitoring functions         • Temperature monitoring       Yes         • Watchdog       Yes         • Status LEDs       Yes         • Fan       No         • Monitoring function via network       Optional         EMC         Interference immunity against discharge of static electricity         • Interference immunity against discharge of static electromage acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2;         Interference immunity against high-frequency electromage acc. to IEC 61000-4-2;         • Interference immunity against high frequency electromage acc. to IEC 61000-4-2;         • Interference immunity against high frequency electromage acc. to IEC 61000-4-2;         • Interference immunity against high frequency electromage acc. to IEC 61000-4-2;         • Interference immunity against high frequency electromage acc. to IEC 61000-4-2;         • Interference immunity against high frequency acc. to IEC 61000-4-2;         • Interference immunity against high frequency         • Interference immunity against high frequency <t< td=""><td>Bus diagnostics</td><td>Yes</td></t<>	Bus diagnostics	Yes	
• Temperature monitoringYes• WatchdogYes• Status LEDsYes• FanNo• Monitoring function via networkOptional <b>EMC</b> Interference immunity against discharge of static electricity• Interference immunity against discharge of static electricity±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2;• Interference immunity against high-frequency electroms10 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			
WatchdogYes• Status LEDsYes• FanNo• Monitoring function via networkOptionalEMCInterference immunity against discharge of static electricity• Interference immunity against discharge of static electricity±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-3; 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 61000-4-3;	Monitoring functions		
<ul> <li>Status LEDs</li> <li>Status LEDs</li> <li>Fan</li> <li>Monitoring function via network</li> <li>Optional</li> <li>EMC</li> <li>Interference immunity against discharge of static electricity</li> <li>Interference immunity against discharge of static electricity</li> <li>Interference immunity against high-frequency electromsurver is fields</li> <li>Interference immunity against high frequency electromsurver is fields</li> </ul>	<ul> <li>Temperature monitoring</li> </ul>	Yes	
• Fan     No       • 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 electricity         • Interference immunity against high-frequency electromage acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±0 kV air discharge acc. to IEC 61000-4-3; 10 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 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6; 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6; 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6; 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 kHz - 80 kHz	Watchdog	Yes	
<ul> <li>Monitoring function via network</li> <li>Optional</li> <li>EMC</li> <li>Interference immunity against discharge of static electricty</li> <li>Interference immunity against discharge of static electricty</li> <li>Interference immunity against discharge of static electromage acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air</li> <li>Interference immunity against high-frequency electromage acc. to IEC 61000-4-2</li> <li>Interference immunity against high frequency electromage acc. to IEC 61000 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 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-3;</li> </ul>	Status LEDs	Yes	
EMC         Interference immunity against discharge of static electricity         • Interference immunity against discharge of static electricity         ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air         Interference immunity against high-frequency electromagnetic fields         • Interference immunity against high frequency radiation         10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 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	● Fan	No	
Interference immunity against discharge of static electricity         • Interference immunity against discharge of static electricity         ±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2; ±8 kV air         Interference immunity against high-frequency electromagnetic fields         • Interference immunity against high frequency radiation         10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 10 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	<ul> <li>Monitoring function via network</li> </ul>	Optional	
<ul> <li>Interference immunity against discharge of static electricity</li> <li>Interference immunity against high-frequency electromagnetic fields</li> <li>Interference immunity against high frequency radiation</li> <li>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</li> </ul>	EMC		
static electricitydischarge acc. to IEC 61000-4-2Interference immunity against high-frequency electromagnetic fields• Interference immunity against high frequency radiation10 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 against discharge of static electri	city	
<ul> <li>Interference immunity against high frequency radiation</li> <li>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</li> </ul>		-	
radiation 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 against high-frequency electromagnetic fields		
Interference immunity to cable-borne interference	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3;	
	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	<ul> <li>Interference immunity on supply cables</li> </ul>		
• 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 &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m	
• Interference immunity on signal cables < 30m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m	<ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>		
Interference immunity against voltage surge	Interference immunity against voltage surge		
• asymmetric interference ±2 kV acc. to IEC 61000-4-5, surge asymmetric	asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric	
• symmetric interference ±1 kV acc. to IEC 61000-4-5, surge symmetric	symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric	
Interference immunity to magnetic fields	Interference immunity to magnetic fields		
<ul> <li>Interference immunity to magnetic fields at 50</li> <li>Hz</li> <li>100 A/m; to IEC 61000-4-8</li> </ul>		100 A/m; to IEC 61000-4-8	
Emission of conducted and non-conducted interference	112		

• Interference emission via line/AC current cables

Degree and class of protection	1020	
IP (at the front)	IP20	
IP (rear)	IP20	
Standards, approvals, certificates		
CE mark	Yes; CE marking / EC Declaration of Conformity	
UL approval	Yes	
• UL 508	Yes	
cULus	Yes	
RCM (formerly C-TICK)	Yes	
KC approval	Yes	
FCC	Yes	
EMC	CE, EN 55022A, EN 61000-6-4, EN 61000-6-2	
Use in hazardous areas		
ATEX Zone 2	Yes; Optional	
IECEx Zone 2	Yes; Optional	
• cULus Class I Zone 2, Division 2	Yes; Optional	
Marine approval		
Germanischer Lloyd (GL)	Yes	
<ul> <li>American Bureau of Shipping (ABS)</li> </ul>	Yes	
• Bureau Veritas (BV)	Yes	
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	Yes	
<ul> <li>Korean Register of Shipping (KRS)</li> </ul>	Yes	
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	Yes	
<ul> <li>Nippon Kaiji Kyokai (Class NK)</li> </ul>	Yes	
Ambient conditions		
Ambient temperature during operation		
<ul> <li>Ambient temperature during operation</li> </ul>	0 °C up to 55 °C	
Ambient temperature during storage/transportation		
• min.	-40 °C	
• max.	70 °C	
Relative humidity		
<ul> <li>Relative humidity</li> </ul>	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)	
Vibrations		
<ul> <li>Vibration resistance during operation acc. to IEC 60068-2-6</li> </ul>	tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s² (1 g)	
Shock testing		
<ul> <li>Shock load during operation</li> </ul>	Tested to DIN IEC 60068-2-29: 50 m/s <sup>2</sup> (5 g), 30 ms, 100 shocks	

Operating systems	
pre-installed operating system	Windows 7 Ultimate (Multi-Language) 32-bit / 64-bit, Windows
	Embedded Standard 7 E/P 32-bit / 64-bit
without operating system	Yes; Optional
pre-installed operating system	
• Windows 7	Yes; Ultimate 32 bit or 64 bit
Coffusion	
Software	
SIMATIC Software	Optionally with pre-installed software bundle SIMATIC WinCC RT
	Advanced / WinAC RTX
Dimensions	
Width	262 mm
Height	139.7 mm
Depth	50.5 mm
last modified:	10/09/2020