SIEMENS

Data sheet

6AG4131-3HG30-1BA3

SIMATIC IPC627E (Box PC), UHD Graphics onboard; DP/DVI-D; 3x Gigbit Ethernet (IE/PN); 6x USB V3.1 Gen.2; 1x serial (COM 1); RAID controller onboard; Watchdog, temperature and fan monitoring; Core i7-8700 (6C/12T, 3.2(4.6) GHz, 12 MB cache, VT-d, AMT); NVRAM; RAID1 2x SSD 2.5" SATA 480 GB in removable frame; 32 GB DDR4-2666 (2x16); 24 V DC industrial power supply Windows 10 Enterprise 2016 LTSB, 64 bit, MUI (en, de, fr, it, es) For Core i7; SIMATIC IPC DiagMonitor supplied; without expansion (HW); 3x PCI, 2x PCIe (x16, x4);

Installation type/mounting	
Mounting	Wall mounting, portrait mounting
Design	Box PC, built-in unit
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 	20 ms
Processor	
Processor type	Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d, AMT)
Chipset	Intel C246
Graphic	
Graphics controller	Intel UHD Graphics 630 (Core i); Intel UHD Graphics 610 (Celeron)
Drives	
Hard disk	2.5" SATA ≥ 320 GB
SSD	Yes; SSD M.2 NVMe 512 GB; SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 2.5" SATA 480 / 960 GB in removable drive bay
Memory	
Type of memory	DDR4-2666 DIMM
Main memory	4 / 8 / 16 / 32 / 64 GB
Capacity of main memory, max.	64 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
Hardware configuration	
Slots	
• free slots	2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2x PCIe (x16, x4); 5x PCIe (1x16, 2x4, 2x1); with card retainer
 Number of PCI slots 	5; Optional
 Number of PCI slots 	5; Optional
Interfaces	
Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)
USB port	6x USB 3.1 Gen. 2 (2x type C)
Connection for keyboard/mouse	USB / USB
serial interface	1x COM
Video interfaces	
Graphics interface	2x DisplayPort; 1x DVI-D
Industrial Ethernet	
 Industrial Ethernet interface 	3x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
Integrated Functions	
Monitoring functions	
 Temperature monitoring 	Yes

**Status LEDS	- Matahaa	Van
First Monitoring function via network Optional	Watchdog Status LEDs	Yes
Monitoring function via network Interference immunity against discharge of static electricity Interference immunity against discharge of static electricity Interference immunity against ligh-frequency electromagnetic fields Interference immunity against high-frequency radiation Interference immunity to cable borne interference Interference immunity to cable borne interference Interference immunity on signal cables > 30m Interference immunity or signal cables > 30m Interference immu		
interference immunity against discharge of static electricity interference immunity against high frequency radiation interference immunity on apply cables interference immunity on apply cables interference immunity on signal cables > 30m interference immunity on signal cables > 30m interference immunity against voltage surge interference immunity in against cables > 30m interference immunity in against voltage surge interference immun		
Interference immunity against discharge of static electricity Interference immunity against high-frequency electromagnetic fields Interference immunity against high-frequency electromagnetic fields Interference immunity against high-frequency radiation Interference immunity to cable-borne interference Interference immunity to cable-borne interference Interference immunity on signal cables - 30m Interference immunity on signal		Optional
Interference immunity against discharge of static electricity 610004-2 610004-2 610004-2 610004-2 610004-2 610004-2 610004-2 610004-2 610004-2 610004-2 610004-3		
electricity		.0.17
Interference immunity against high frequency radiation Interference immunity to cable-borne interference Interference immunity on supply cables Interference immunity on suppl cables > 30m Interference		
Cit. 2, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 80 MHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 80 MHz, 80% AM acc. to IEC 61000-4-4; burst. ±1 kY acc. to IEC 61000-4-5; surge symmetric ±2 kY acc. to IEC 61000-4-5; surge asymmetric ±2 kY acc. to IEC 61000-4-4; burst, length > 3 m ±1 kY acc. to IEC 61000-4-4; burst, length > 3 m ±1 kY acc. to IEC 61000-4-4; burst, length > 3 m ±1 kY acc. to IEC 61000-4-4; burst, length > 3 m ±2 kY acc. to IEC 61000-4-4; burst, length > 3 m ±1 kY acc. to IEC 61000-4-5; surge asymmetric interference interfer	Interference immunity against high-frequency electromagnetic field	S
Interference immunity on supply cables symmetric: 22 kV acc. to IEC 61000-4-6, surge symmetric interference immunity on signal cables > 30m	 Interference immunity against high frequency radiation 	10 V/m for 80 2 700 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2.7 to 6 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 80 MHz, 80% AM acc. to IEC 61000-4-6
Interference immunity on signal cables >30m	Interference immunity to cable-borne interference	
Interference immunity on signal cables < 30m Interference immunity against voltage surge	• Interference immunity on supply cables	
burst, length > 3 m Interference immunity against voltage surge asymmetric interference symmetric interference interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission will funk?d current cables En 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A Degree and class of protection IP degree of protection IP degree of protection IP degree of protection Standard's, approvals, certificates CE mark Yes UL approval Ves RCM (formerly C-TICK) Yes RCM (formerly Gost-R) FCC Yes EAC (formerly Gost-R) FCC Yes EAC (formerly Gost-R) FCC Yes EAC (formerly Gost-R) FCC Yes ENC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval American Bureau of Shipping (ABS) Per Norske Veritas (DNV) Nes Port Norske Veritas (DNV) Pes Ambient temperature during operation min. 5°C minx 65°C Ambient temperature during storage/transportation min20°C Relative humidity Tested according to IEC 60068-2-78, IEC 60068-2-80. Operation: 5% to 60% 25°C (no condensation), Storage: 5% to 95% at 25°C (no condensation) storage: 5% to 95% at 25°C (no condensation) emax Foliation of the protection	 Interference immunity on signal cables >30m 	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
Interference immunity against voltage surge	• 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
symmetric interference 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 Pogree and classes of protection IP degree of protection IP degre	Interference immunity against voltage surge	bulst, length > 3 m
Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables En 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A Degree and class of protection IP20 Standards, approvals, certificates CE mark Ves UL approval Ves CULus RCM (formerly C-TICK) Yes RCM (formerly Gost-R) FCC Yes EAC (formerly Gost-R) FCC Yes EAC (formerly Gost-R) IP20 Marine approval American Bureau of Shipping (ABS) Po Ho Norse Verlias (DNV) Nippon Kaiji Kyokai (Class NK) Ambient temperature during operation IP20 Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 28 °C (no condensation) Vibrations IVES Shock testing Pore-installed operating system Presi-installed operating system Periodical Since A (Mindows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Ves; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables En 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A Degree and class of protection IP20 Standards, approvals, certificates CE mark Ves UL approval Ves CULus RCM (formerly C-TICK) Yes RCM (formerly Gost-R) FCC Yes EAC (formerly Gost-R) FCC Yes EAC (formerly Gost-R) IP20 Marine approval American Bureau of Shipping (ABS) Po Ho Norse Verlias (DNV) Nippon Kaiji Kyokai (Class NK) Ambient temperature during operation IP20 Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 28 °C (no condensation) Vibrations IVES Shock testing Pore-installed operating system Presi-installed operating system Periodical Since A (Mindows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Ves; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	symmetric interference	
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 degree		
● Interference emission via line/AC current cables Degree and class of protection IP degree of protection Standards, approvals, certificates CE mark UL approval UL approval CULus Pes RCM (formerly C-TICK) Yes RCM (formerly Gost-R) FCC EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval • American Bureau of Shipping (ABS) • Det Norske Verilas (DNV) • Nippon Kaiji Kyokai (Class NK) Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. • Relative humidity • Shock load during operation • Tested to DIN IEC 60068-2-8: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s* (1 g) Ns on Ns, 100 shocks Operating system pre-installed operating system Pess Shock load turisp system Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI *Yes Yes Hondon-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A Pes Shock load turing operation IP20 Fes Shock load turing operation END 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Pes Shock lesting • Shock load during operation acc. to IEC 60068-2-2007 Tested to DIN IEC 60068-2-28: 50 m/s² (5 g), 30 ms, 100 shocks Operating system Pesi-installed operating system Yes; Optional Per Ses Shock load Large protection and the protection	, ,	100 A/m; to IEC 61000-4-8
Degree and class of protection IP degree of protection Standards, approvals, certificates CE mark Ves UL approval Yes UL approval Yes CULIUS Yes RCM (formerly C-TICK) Yes RCA proval EAC (formerly Gost-R) FCC Yes EAC (formerly Gost-R) FCC Yes EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval American Bureau of Shipping (ABS) Pet Norske Verilas (DNV) Pes Pot Norske Verilas (DNV) Pes Ambient temperature during operation min. Min. Min. Min. Min. Min. Min. Min. M	Emission of conducted and non-conducted interference	
Degree and class of protection IP degree of protection Standards, approvals, certificates CE mark Ves UL approval Yes UL approval Yes CULUS RCM (formerly C-TICK) KC approval Yes EAC (formerly Gost-R) FCC Yes EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval • American Bureau of Shipping (ABS) • Det Norske Verilas (DNV) • Nippon Kaiji Kyokai (Class NK) Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. 60 °C Relative humidity 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 • Vibration resistance during operation acc. to IEC 60068-2-8 Shock load during operation Tested to DIN IEC 60068-2-9: 50 m/s² (5 g), 30 ms, 100 shocks Operating system Pre-Installed operating system Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI vithout operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI vithout operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
PP degree of protection PP20	Degree and class of protection	
Standards, approvals, certificates CE mark Ves CUL approval CULus Yes RCM (formerly C-TICK) Yes RCM (formerly Gost-R) FCC Yes EMC EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval • American Bureau of Shipping (ABS) • Det Norske Veritas (DNV) • Nippon Kaji Kyokai (Class NK) Ambient conditions Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Ambient temperature during storage/transportation • min. • max. Abbient conditions Arbient temperature during storage/transportation • min. • max. Abbient temperature during storage/transportation • min. • max. Abbient temperature during storage/transportation • min. • max. Abbient conditions Arbient temperature during storage/transportation • min. • max. Abbient conditions Arbient temperature during storage/transportation • min. • max. Abbient conditions Arbient temperature during storage/transportation • min. • Co °C Relative humidity • Relative humidity • Relative humidity • Relative humidity • Tested according to IEC 60068-2-78, IEC 60068-2-30. Operation: 5% to 80% 25 °C (no condensation). Storage: 5% to 95% at 25 °C (no condensation) Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation • Tested to DIN IEC 60068-2-9: 50 m/s² (5 g), 30 ms, 100 shocks Operating system pre-installed operating system Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		IP20
Ves		
Ves		Yes
cULus Yes RCM (formerly C-TICK) Yes KC approval Yes EAC (formerly Gost-R) Yes FCC Yes EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval *** • American Bureau of Shipping (ABS) Yes • Det Norske Veritas (DNV) Yes • Nippon Kalji Kyokai (Class NK) Yes Ambient conditions *** Ambient temperature during operation *** • max. 55 °C Ambient temperature during storage/transportation *** • max. 60 °C Relative humidity *** • Relative humidity *** • Relative humidity *** • Vibration resistance during operation acc. to IEC 60068- 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibration resistance during operation acc. to IEC 60068- 26 °C (no condensation) to IEC 60068- 2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 50 Hz 9.8 m/s² (1 g) Shock testing *** • Shock load during operation *** • Shock load during operation ***		
RCM (formerly C-TICK) KC approval Yes EAC (formerly Gost-R) Yes FCC Yes EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval • American Bureau of Shipping (ABS) • Det Norske Veritas (DNV) • Nippon Kaiji Kyokai (Class NK) Ambient conditions Ambient temperature during operation • min. • max. 5 5 °C Ambient temperature during storage/transportation • min. • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Relative humidity • Sibration resistance during operation acc. to IEC 60068-2-6 (no condensation), Storage: 5% to 95% at 25 °C (no condensation) * Vibrations • Vibration resistance during operation • Tested according 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 testing • Shock load during operation Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks Operating system pre-installed operating system without operating system Pesitalled operating system • Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	· ·	
KC approval EAC (formerly Gost-R) FCC Yes EMC American Bureau of Shipping (ABS) • Det Norske Veritas (DNV) • Nippon Kailj Kyokai (Class NK) Ambient conditions Ambient conditions Ambient temperature during operation • min. • max. 5 °C Ambient temperature during storage/transportation • min. • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Vibration resistance during operation acc. to IEC 60068-2-26 Shock testing • Shock load during operation Tested a coording to DIN IEC 60068-2-26: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 50 Hz 9.8 m/s² (1 g) Shock testing • Shock load during operation Vindows 10 Enterprise • Windows 10 Enterprise • Windows 10 Enterprise Ves; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI we kind to the provided the province of t		
EAC (formerly Gost-R) FCC Yes EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval • American Bureau of Shipping (ABS) Yes • Det Norske Veritas (DNV) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions Ambient temperature during operation • min. • 55 °C • max. 55 °C Ambient temperature during storage/transportation • min. • 20 °C • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Relative numidity • Vibration resistance during operation acc. to IEC 60068-25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibrations • Vibration resistance during operation acc. to IEC 60068-25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Per-installed operating system Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Without operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		
FCC Yes EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval • American Bureau of Shipping (ABS) Yes • Det Norske Veritas (DNV) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions Ambient temperature during operation • min. 5° °C • max. 55° C Ambient temperature during storage/transportation • min20° °C • max. 60° °C Relative humidity • Relative humidity • Relative humidity • Relative humidity • Sivoration resistance during operation acc. to IEC 60068-25° (c) no condensation). Storage: 5% to 95% at 25° °C (no condensation) Vibrations • Vibration resistance during operation acc. to IEC 60068-200 Hz 9.8 m/s² (1 g) Shock testing • 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; Optional pre-installed operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	• •	
EMC CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005 Marine approval • American Bureau of Shipping (ABS) • Det Norske Veritas (DNV) • Nippon Kaiji Kyokai (Class NK) Ambient conditions Ambient temperature during operation • min. • max. 5 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °		
Marine approval American Bureau of Shipping (ABS) Det Norske Veritas (DNV) Yes Nippon Kalji Kyokal (Class NK) Ambient conditions Ambient temperature during operation min. max. So C Ambient temperature during storage/transportation min. max. So °C Ambient temperature during storage/transportation min. max. So °C Ambient temperature during storage/transportation min. max. So °C Relative humidity Relative humidity Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibrations Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Yes; Optional pre-installed operating system Vindows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		
American Bureau of Shipping (ABS) Det Norske Veritas (DNV) Nippon Kaiji Kyokai (Class NK) Ambient conditions Ambient temperature during operation ini. max. 5 °C Ambient temperature during storage/transportation ini. min. c20 °C Ambient temperature during storage/transportation ini. max. 60 °C Relative humidity Relative humidity Relative humidity interest according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibrations interest according 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 testing interest according to DIN IEC 60068-2-2: 50 m/s² (5 g), 30 ms, 100 shocks Operating systems pre-installed operating system pre-installed operating system Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Optional		OE, EN 01000 0 0.2007 1711.2011, EN 01000 0 2.2000
Det Norske Veritas (DNV) Nippon Kaiji Kyokai (Class NK) Ambient conditions Ambient temperature during operation min.	• •	Yes
 Nippon Kaiji Kyokai (Class NK) Ambient conditions Ambient temperature during operation • min. • max. 5 °C Ambient temperature during storage/transportation • min. • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Vibration resistance during operation acc. to IEC 60068-2-78 (IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation)), Storage: 5% to 95% at 25 °C (no condensation) Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g) 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI 		
Ambient temperature during operation • min. • min. • max. 5 °C Ambient temperature during storage/transportation • min. • min. • min. • min. • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Relative humidity • Vibration resistance during operation acc. to IEC 60068-25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibration resistance during operation acc. to IEC 60068-2-8 m/s² (1 g) Shock testing • Shock load during operation • 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 without operating system • Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	• •	
Ambient temperature during operation • min. • max. 5 °C Ambient temperature during storage/transportation • min. • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Relative humidity • Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 (10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g) Shock testing • Shock load during operation • 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		165
 min. max. min. min. max. max.<td></td><td></td>		
■ max. ■ min. ■ max. ■ Relative humidity ■ Relative humidity ■ Relative humidity ■ Relative humidity ■ Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibrations ■ 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 Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system ▼es; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		E°C
Ambient temperature during storage/transportation • min. • max. 60 °C Relative humidity • Relative humidity • Relative humidity • Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		
 min. max. Relative humidity Relative humidity Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Optional Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI 		33 C
Relative humidity Relative humidity Relative humidity Relative humidity Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% 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 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Yes; Optional Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		20.00
Relative humidity Relative humidity Relative humidity Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% 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) Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks Operating systems pre-installed operating system Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Ves; Optional Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI		
 Relative humidity Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation) Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 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 Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI 		6U °C
Vibrations • 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 60068-2-6: 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system • Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Optional Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	·	
 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI Yes; Optional Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI 	Relative humidity	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)
2-6 500 Hz 9.8 m/s² (1 g) 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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Yes; Optional pre-installed operating system ◆ Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	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 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Yes; Optional pre-installed operating system ● Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	9 .	tested according 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)
Operating systems pre-installed operating system Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Yes; Optional pre-installed operating system Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	Shock testing	
pre-installed operating system Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI without operating system Yes; Optional pre-installed operating system • Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	Shock load during operation	Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks
without operating system pre-installed operating system • Windows 10 Enterprise Yes; Optional Yes; Optional Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	Operating systems	
pre-installed operating system ● Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	pre-installed operating system	Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI
Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI	without operating system	Yes; Optional
	pre-installed operating system	
Software	Windows 10 Enterprise	Yes; Windows 10 Enterprise 2016 LTSB or 2019 LTSC 64-bit, MUI
	Software	
SIMATIC Software Optional package with SIMATIC WinCC	SIMATIC Software	Optional package with SIMATIC WinCC

Dimensions	
Width	314 mm
Height	93 mm; For variant 5x PCI(e): 155 mm
Depth	301 mm; incl. mounting rail

last modified:

6/25/2021