SIEMENS

Data sheet

6AV7230-0EA20-2CA0



Figure similar

*** no longer available *** SIMATIC IPC377E (basic panel PC) 19" Touch (1366 x 768); Celeron N3160 (4C/4T); 4 GB RAM; 256 GB SSD; 1x display port graphic; 1x VGA port graphic; 2x 10/100/1000 Mbps Ethernet RJ45; 2x USB 3.0; 2x USB 2.0; 4x serial ports (COM); 1x mPCle / 1x mSATA; Windows 10 Enterprise 2016 LTSB, 64-bit; MUI (en,de,fr,it,es); 24 V DC power supply; built-in, VESA mounting

Installation type/mounting	Danal require and V/CCA having the land working
Mounting	Panel PC, built in unit
Design	Panel PC, built-in unit
Supply voltage	a.vvpa
Type of supply voltage	24 V DC
Mains buffering	
Mains/voltage failure stored energy time	10 ms
Processor	
Processor type	Intel Celeron N3160
Drives	
Hard disk	500 GB HDD
Memory	
Type of memory	DDR3L
Main memory	4 GB (pre-installed)
Capacity of main memory, max.	8 Gbyte
Hardware configuration	
Slots	
• free slots	1x mPCle (half-size), 1x mSATA (full-size)
 Number of PCI slots 	0
Interfaces	
Number of industrial Ethernet interfaces	2; 2x RJ45 (independent)
Number of PROFINET interfaces	2
USB port	2x USB 2.0, 2x USB 3.0 (high current)
Video interfaces	
Graphics interface	1x DisplayPort, 1x VGA
Industrial Ethernet	
Industrial Ethernet interface	2x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
Protocols	
Protocols (Ethernet)	
• TCP/IP	Yes
Integrated Functions	
Monitoring functions	
Temperature monitoring	Yes
Watchdog	Yes
Status LEDs	POWER, HDD
● Fan	No
EMC	

Interference immunity against discharge of static electricity	
 Interference immunity against discharge of static electricity 	±6 kV contact; ±8 kV air (to IEC 1000-4-2; ESD)
Interference immunity against high-frequency electromagnetic field	s
Interference immunity against high frequency radiation	10 V/m for 80 1 000 MHz, 80 % AM according to IEC 61000-4-3; 3 V/m for 1.4 6 GHz, 80 % AM according to IEC 61000-4-3
Interference immunity to cable-borne interference	
Interference immunity on supply cables	±2 kV (according to IEC 61000-4-4, burst); ±1 kV (according to IEC 61000-4-5, surge pulse/line to line); ±2 kV (according to IEC 61000-4-5, surge pulse/line to ground)
 Interference immunity on signal cables >30m 	±2 kV acc. to IEC 61000-4-4, burst; ±2 kV acc. to IEC 61000-4-5, surge
 Interference immunity on signal cables < 30m 	±1 kV acc. to IEC 61000-4-4, Burst
Interference immunity against voltage surge	
asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP40
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes
Dust protection	Protection against foreign bodies > 1 mm
·	
Ambient conditions	
·	
Ambient conditions	0 °C
Ambient conditions Ambient temperature during operation	
Ambient conditions Ambient temperature during operation • min.	0 °C
Ambient conditions Ambient temperature during operation • min. • max.	0 °C
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation	0 °C 45 °C
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min.	0 °C 45 °C -20 °C
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max.	0 °C 45 °C -20 °C
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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)
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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)
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation Operating systems	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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) Tested according to IEC 60068-2-27: 150 m/s², 11 ms
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation Operating systems pre-installed operating system	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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) Tested according to IEC 60068-2-27: 150 m/s², 11 ms
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation Operating systems pre-installed operating system pre-installed operating system	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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) Tested according to IEC 60068-2-27: 150 m/s², 11 ms Windows 10 Enterprise 2016 LTSB, 64 bit, MUI
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation Operating systems pre-installed operating system pre-installed operating system • Windows 10 Enterprise	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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) Tested according to IEC 60068-2-27: 150 m/s², 11 ms Windows 10 Enterprise 2016 LTSB, 64 bit, MUI
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation Operating systems pre-installed operating system pre-installed operating system • Windows 10 Enterprise Dimensions	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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) Tested according to IEC 60068-2-27: 150 m/s², 11 ms Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Yes; Windows 10 IoT Enterprise 2016 LTSB, 64bit, MUI
Ambient conditions Ambient temperature during operation • min. • max. Ambient temperature during storage/transportation • min. • max. Relative humidity • Relative humidity Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 Shock testing • Shock load during operation Operating systems pre-installed operating system pre-installed operating system • Windows 10 Enterprise Dimensions Width	0 °C 45 °C -20 °C 60 °C Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation) 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) Tested according to IEC 60068-2-27: 150 m/s², 11 ms Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Yes; Windows 10 IoT Enterprise 2016 LTSB, 64bit, MUI