## SIEMENS

## Data sheet

## 6AV7230-0CA20-0CA0



SIMATIC IPC377E (basic panel PC) 12" Touch; 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 slot; 1x mSATA slot; without operating system; 24 V DC power supply; built-in unit

Figure similar

General information	
Product type designation	IPC377E
Installation type/mounting	
Mounting	Panel mount and VESA, horizontal and vertical
Design	Panel PC, built-in unit
Supply voltage	
Type of supply voltage	24 V DC
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	10 ms
Processor	
Processor type	Intel Celeron N3160
Drives	
Hard disk	1 TB 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 mPCIe (half-size), 1x mSATA (full-size)
Number of PCI slots	0
Interfaces	
Number of industrial Ethernet interfaces	2; 2x RJ45 (independent)
USB port	2x USB 2.0, 2x USB 3.0 (high current)
Video interfaces	
Graphics interface	1x DisplayPort, 1x VGA
Industrial Ethernet	
<ul> <li>Industrial Ethernet interface</li> </ul>	2x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
Protocols	
Protocols (Ethernet)	
• TCP/IP	Yes
Integrated Functions	
Monitoring functions	

<ul> <li>Temperature monitoring</li> </ul>	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 electromagneti	c fields
<ul> <li>Interference immunity against high frequency radiation</li> </ul>	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	
<ul> <li>Interference immunity on supply cables</li> </ul>	$\pm$ 2 kV (according to IEC 61000-4-4, burst); $\pm$ 1 kV (according to IEC 61000-4-5, surge pulse/line to line); $\pm$ 2 kV (according to IEC 61000-4-5, surge pulse/line to ground)
<ul> <li>Interference immunity on signal cables &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-4, burst; ±2 kV acc. to IEC 61000-4-5, surge
<ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>	±1 kV acc. to IEC 61000-4-4, Burst
Interference immunity against voltage surge	
<ul> <li>asymmetric interference</li> </ul>	±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	
<ul> <li>Interference immunity to magnetic fields at 50 Hz</li> </ul>	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 temperature during operation	
<ul> <li>Ambient temperature during operation</li> </ul>	0 to +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: Operation: 5 % to 85 % at 30 $^{\circ}$ C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 $^{\circ}$ C (no condensation)
Vibrations	
Vibration resistance during operation acc. to IEC 60068-2-6	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	
<ul> <li>Shock load during operation</li> </ul>	Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms
Operating systems	
pre-installed operating system	No
without operating system	Yes
Dimensions	
Width	320 mm
Height	225.6 mm
Depth	95.2 mm
last modified:	6/9/2021 🖸