

SIMATIC IPC277E (NANOPANEL PC); 2 X 10/100/1000 MBIT/S  
 ETHERNET RJ45; 1X DISPLAY-PORT GRAPHIC; 1 X USB 3.0; 1 X  
 SERIAL (COM1); CFAST-SLOT; 24V DC POWER SUPPLY;



Figure similar

Installation type/mounting	
Design	Panel PC, built-in unit
maximum permissible installation angle +/-	45°
Supply voltage	
Type of supply voltage	24 V DC
Mains buffering	
• Mains/voltage failure stored energy time	20 ms
Processor	
Processor type	Intel Celeron N2807 / N2930
Drives	
SSD	Yes; ≥ 80 GB optional
Memory	
Type of memory	DDR3L
Main memory	2 / 4 / 8 GB
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	
• Number of compact flash slots	1; CFast
Interfaces	
USB port	1x USB 3.0 / 3x USB 2.0 (7"/9": 2x USB 2.0)
Connection for keyboard/mouse	USB / USB
serial interface	1x COM (1x RS 232 / 422 / 485), selectable in the BIOS
Video interfaces	
• Graphics interface	1x DisplayPort
Industrial Ethernet	
• Industrial Ethernet interface	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
— 100 Mbps	Yes
— 1000 Mbps	Yes
Integrated Functions	
Monitoring functions	
• Temperature monitoring	Yes
• Watchdog	Yes
• Status LEDs	No
• 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
Interference immunity against high-frequency electromagnetic fields	
• Interference immunity against high frequency radiation	10 V/m, 80 MHz to 2 GHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m, 2 GHz to 2.7 GHz, 80 % AM acc. to IEC 61000-4-3; 10 V, 10 kHz to 80 MHz, 80 % AM acc. to IEC 61000-4-6
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
• Interference immunity on signal cables >30m	±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
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	

<ul style="list-style-type: none"> <li>Interference immunity to magnetic fields at 50 Hz</li> </ul>	100 A/m; to IEC 61000-4-8
<b>Emission of conducted and non-conducted interference</b>	
<ul style="list-style-type: none"> <li>Interference emission via line/AC current cables</li> </ul>	Noise emission: EN 61000-6-4:2007 +A1:2011 (industrial environments), CISPR 22 Class B, FCC Class A
<b>Degree and class of protection</b>	
IP (at the front)	IP65
IP (rear)	IP20
<b>Standards, approvals, certificates</b>	
CE mark	Yes
UL approval	Yes
<ul style="list-style-type: none"> <li>UL 508</li> </ul>	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-4:2007 +A1:2011, EN 61000-6-2:2005
<b>Marine approval</b>	
<ul style="list-style-type: none"> <li>Germanischer Lloyd (GL)</li> <li>American Bureau of Shipping (ABS)</li> <li>Bureau Veritas (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>Nippon Kaiji Kyokai (Class NK)</li> </ul>	Yes Yes Yes Yes Yes Yes
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>Ambient temperature during operation</li> <li>min.</li> <li>max.</li> </ul>	0 °C to 50 °C 0 °C 50 °C; 19": max. 45 °C
<b>Ambient temperature during storage/transportation</b>	
<ul style="list-style-type: none"> <li>min.</li> <li>max.</li> </ul>	-20 °C 60 °C
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>Relative humidity</li> </ul>	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)
<b>Vibrations</b>	
<ul style="list-style-type: none"> <li>Vibration resistance during operation acc. to IEC 60068-2-6</li> </ul>	Tested according to IEC 60068-2-6: 5 Hz to 8.4 Hz: 3.5 mm, 8.4 Hz to 500 Hz: 9.8 m/s <sup>2</sup>
<b>Shock testing</b>	
<ul style="list-style-type: none"> <li>Shock load during operation</li> </ul>	Tested according to IEC 60068-2-27: 50 m/s <sup>2</sup> , 30 ms

## Operating systems

Operating system	Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 E/P, 32-bit / 64-bit
pre-installed operating system	Yes
without operating system	Yes
pre-installed operating system	
• Windows 7	Yes; Ultimate 32 bits or 64 bits
• Windows 10 IoT Enterprise	Yes; Windows 10 IoT Enterprise LTSB 2016 (64-bit) MUI

## Software

SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX
<b>last modified:</b>	11/28/2017