

SIMATIC IPC827C (BOX PC), HD GRAFIK ONBOARD,
2X10/100/1000 MBIT/S ETHERNET RJ45; 4 X USB V2.0 (HIGH
CURRENT); 1 X SERIAL (COM1); RAID-CONTROLLER ON
BOARD; COMPACT FLASH DRIVE NO.1 FRONT SIDE;
WATCHDOG, TEMP.-/FAN- MONITORING;

PC configuration	
Graphics card	Intel HD graphics controller
Chipset	Intel QM57 Express Chipset
Installation type/mounting	
Design	Box PC, built-in unit
Supply voltage	
Type of supply voltage	100 V AC / 240 V AC (autorange) 50/60 Hz; optional 24 V DC
Processor	
Processor type	Core i7-610E (2C/4T, 2.53 GHz, TB, HT, VT, AMT, 4MB cache); Core i3-330E (2C/4T, 2.13 GHz, HT, VT, 3MB cache); Celeron P4505 (2C/2T, 1.86 GHz, VT, 2MB cache);
Drives	
Optical drives	Optional: DVD±R±RW combi drive; on rear, can be operated from side
Hard disk	3.5" SATA hard disk ≥ 250 GB, optional ≥ 500 GB, optional: RAID1 2x 2.5" SATA ≥ 320 GB, optional: Solid state drive (SSD) ≥ 160 GB; all hard disk drives within the enclosure are vibration- damped
SSD	Yes; Optional
Memory	
Main memory	1 GB to 8 GB DDR3 1066 DIMM, ECC optional
• Capacity of main memory, max.	8 Gbyte
Hardware configuration	
Slots	
• Free slots	3xPCI, 1 x PCIe (x4), 1 x PCIe (x16), 1xslot for CompactFlash Card
• Number of PCI slots	5
• Number of compact flash slots	1
Interfaces	
PROFIBUS/MPI	Optionally onboard, isolated, max. 12 Mbps, no plug-in card necessary, CP 5611-A2-compatible
serial interface	COM1: 1 x V.24 (RS232)

parallel interface	optional LPT1
USB port	4x USB 2.0 high speed/high current
Connection for keyboard/mouse	USB / USB
Video interfaces	
• Graphics interface	DVI-I: VGA / DVI combined
Industrial Ethernet	
• Industrial Ethernet interface	Onboard, 2 x 10/100/1000 Mbit/s, RJ45, no plug-in card necessary
— 100 Mbps	Yes
— 1000 Mbps	Yes
Monitoring functions	
Temperature	Yes
Watchdog	Yes
Status LEDs	Yes
Fan	Yes
Monitoring function via the 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 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
Surge immunity	
• Asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
• Symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Immunity against high-frequency electromagnetic fields	
• Interference immunity against high frequency radiation	10 V/m for 80 - 1000 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
Immunity to magnetic field interference	
• Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
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	
IP (at the front)	20
IP degree of protection	IP20
IP (rear)	IP20

Standards, approvals, certificates	
Approval	CE, cULus (508), C-TICK
CE mark	Yes
UL approval	Yes
cULus	Yes
KC approval	Yes
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
EN 61000-6-2	Yes

Ambient conditions

Ambient temperature in operation	
- Ambient temperature in operation - Min. - max.	+5 °C to +45 °C, +5 °C to +50 °C with USB / PCI(e) less than 20 W; +5 °C to +55 °C with USB / PCI(e) less than 10 W 5 °C 55 °C
Relative humidity	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: 5% to 80% at 25 °C (no condensation)
Vibrations	
Vibration load in operation	Tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s ² (1 g)
Shock testing	
Shock loading in operation	Tested to DIN IEC 60068-2-29: 50 m/s ² (5g), 30 ms, 100 shocks

Operating systems

Operating system	Windows XP Prof. SP3, MUI; Windows 7 Ultimate 32/64Bit, MUI; Windows Embedded Standard 2009 English on 8 GB CompactFlash; without operating system;
Pre-installed operating system	Yes
- Windows XP Prof. - Windows 7	Yes Yes; Ultimate 32 bits or 64 bits
without operating system	Yes

Software

SIMATIC Software	Optional in a package with SIMATIC WinCC, WinCC flexible, or WinAC RTX
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Dimensions

Width	312 mm
Height	153 mm; With DVD drive: 174 mm
Depth	301 mm; incl. mounting rail

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