

SIMATIC IPC827C (Box PC), HD graphic onboard, 2x10/100/1000 Mbit/s Ethernet RJ45; 4xUSB V2.0 (high current); 1x serial (COM 1); RAID controller onboard; CompactFlash Drive No. 1 on front; Watchdog, temp./fan monitoring

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	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);
Chipset	Intel QM57 Express Chipset
Graphic	
Graphics controller	Intel HD graphics controller
Drives	
Optical drives	DVD±R±RW combi-drive, optional
Hard disk	3.5" SATA ≥ 250 GB, optional ≥ 500 GB; RAID1 2x 2.5" SATA ≥ 320 GB; all internal drives are vibration-damped
SSD	Yes; ≥ 240 GB optional
Memory	
Type of memory	DDR3 1066 DIMM
Main memory	1 / 2 / 4 / 8 GB; ECC optional
Capacity of main memory, max.	8 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	2 Mbyte; 128 KB can be stored in the buffer time; optional
Hardware configuration	
Slots	
• free slots	3x PCI, 1x PCIe (x4), 1x PCIe (x16); with card retainer

- Number of PCI slots
- Number of PCI slots
- Number of compact flash slots

3
2
1

Interfaces

PROFIBUS/MPI	Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5611-A2
Number of PROFINET interfaces	3; Optional
USB port	4x USB 2.0 high speed/high current
Connection for keyboard/mouse	USB / USB
serial interface	COM1: 1 x V.24 (RS232)
parallel interface	optional LPT1

Video interfaces

- Graphics interface

DVI-I: VGA / DVI combined

Industrial Ethernet

- Industrial Ethernet interface
 - 100 Mbps
 - 1000 Mbps

Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
Yes
Yes

Interrupts/diagnostics/status information

- Bus diagnostics

Yes

Integrated Functions

Monitoring functions

- Temperature monitoring
- Watchdog
- Status LEDs
- Fan
- Monitoring function via network

Yes
Yes
Yes
Yes
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 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

Interference immunity to cable-borne interference

- Interference immunity on supply cables
- Interference immunity on signal cables >30m
- Interference immunity on signal cables < 30m

±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
±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
±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	
• 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)	IP20
IP (rear)	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
Ambient conditions	
Ambient temperature during operation	
• Ambient temperature during operation	+5 °C up to 55 °C
• min.	5 °C
• max.	55 °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 80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)
Vibrations	
• Vibration resistance during operation acc. to IEC 60068-2-6	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 load during operation	Tested to DIN IEC 60068-2-29: 50 m/s ² (5 g), 30 ms, 100 shocks
Operating systems	
Operating system	Windows XP Prof. SP3, MUI; Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 2009 English on 8 GB CompactFlash; without operating system
pre-installed operating system	Yes
without operating system	Yes

pre-installed operating system	
• Windows XP Professional	Yes
• Windows 7	Yes; Ultimate 32 bits or 64 bits
Software	
SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX
Dimensions	
Width	312 mm
Height	153 mm; With DVD drive: 174 mm
Depth	301 mm; incl. mounting rail
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