

\*\*\*no longer available\*\*\* SIMATIC HMI IPC677C (Panel PC),  
2x10/100/1000 Mbit/s Ethernet; 4x USB V2.0, 1x serial (COM1);  
Watchdog, temperature and Fan monitoring; RAID controller  
onboard; 12" Key; 800x 600

General information	
Product type designation	IPC677C
Display	
Design of display	12" TFT
Screen diagonal	12 in
Resolution (pixels)	
• Horizontal image resolution	800 Pixel
• Vertical image resolution	600 Pixel
General features	
• Expansion components	Uninterruptible power supply (USP), SIMATIC NET communication modules
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Input device	
• Mouse, at front	Yes
Keyboard fonts	
• Function keys	Yes
— Number of function keys	36
• alphanumeric keyboard	Yes
Touch operation	
• Design as touch screen	No
Installation type/mounting	
Mounting	For horizontal and vertical mounting
Design	Panel PC, built-in unit
central design	Yes
distributed design	No
maximum permissible installation angle +/-	20°
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

<b>Mains buffering</b>	
• Mains/voltage failure stored energy time	20 ms
<b>Power loss</b>	
In full configuration	140W max. (15W included per slot)
<b>Processor</b>	
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
<b>Graphic</b>	
Graphics controller	Intel HD graphics controller
<b>Drives</b>	
Optical drives	Optional: DVD±R±RW combi drive; on rear, can be operated from side
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; ≥ 160 GB optional
<b>Memory</b>	
Type of memory	DDR3 1066 DIMM
Main memory	1 GB to 8 GB DDR3 1066 DIMM, ECC optional
Capacity of main memory, max.	8 Gbyte
<b>Data areas and their retentivity</b>	
Retentive data area (incl. timers, counters, flags), max.	2 Mbyte; 128 KB can be stored in the buffer time; optional
<b>Hardware configuration</b>	
<b>Slots</b>	
• free slots	2x PCI or 1x PCI & 1x PCIe (x16) (slots with card retainer), 1x slot for CompactFlash Card
• Number of PCI slots	2
• Number of PCI slots	1
• Number of compact flash slots	1
<b>Interfaces</b>	
PROFIBUS/MPI	Optionally onboard, isolated, max. 12 Mbps, no plug-in card necessary, CP 5611-A2-compatible
Number of PROFINET interfaces	3; Optional
USB port	1x at front, 4x at rear, USB 2.0 (500 mA)
Connection for keyboard/mouse	USB / USB
serial interface	COM1: 1 x V.24 (RS232)
parallel interface	optional LPT1
<b>Video interfaces</b>	

• Graphics interface	DVI-I usable for additional display unit (VGA via adapter); color depth 32 bits, 8 to 128 MB Shared Memory
<b>Industrial Ethernet</b>	
• Industrial Ethernet interface	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
— 100 Mbps	Yes
— 1000 Mbps	Yes
<b>Integrated Functions</b>	
<b>Monitoring functions</b>	
• Temperature monitoring	Yes
• Watchdog	Yes
• Status LEDs	Yes
• Fan	Yes
• Monitoring function via network	Optional
<b>EMC</b>	
<b>Interference immunity against discharge of static electricity</b>	
• 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
<b>Interference immunity against high-frequency electromagnetic fields</b>	
• 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
<b>Interference immunity to cable-borne interference</b>	
• 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
<b>Interference immunity against voltage surge</b>	
• asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
• symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
<b>Interference immunity to magnetic fields</b>	
• Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
<b>Emission of conducted and non-conducted interference</b>	
• Interference emission via line/AC current cables	EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
<b>Degree and class of protection</b>	
IP (at the front)	IP65 (on front) to EN60529 and NEMA4
IP (rear)	IP20
<b>Standards, approvals, certificates</b>	
Approval	CE, cULus (508)
CE mark	Yes

UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-4:2007, EN 61000-6-2:2005
Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes
Ambient conditions	
Ambient temperature during operation	
• Ambient temperature during operation	12", 15": +5 °C to +50 °C; 19": +5 °C to +45 °C
• min.	5 °C
• max.	50 °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: 5% to 80% 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 <sup>2</sup> (1 g)
Shock testing	
• Shock load during operation	Tested to DIN IEC 60068-2-29: 50 m/s <sup>2</sup> (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 in a package with SIMATIC WinCC, WinCC flexible, or WinAC RTX

Accessories	
Accessory components	Slide-in keyboard labels
Dimensions	
Width of the housing front	482.6 mm
Height of housing front	310.3 mm
Overall depth	
• additional mounting depth (optical drive)	21 mm
Mounting cutout/device depth (W x H x T)	450 mm x 290 mm / 145 mm (incl. optical drive)
Weights	
Panel PC in central design, approx.	12 kg
<b>last modified:</b>	04/06/2018