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Data sheet 6AV7890-0AE21-1AC0

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" Touch; 800x 600 with front-side USB-Schnittstelle 24 V DC power supply Core I3-330E (2C/4T, 2.13 GHz, HT, VT, 3 MB cache); PROFIBUS/MPI (CP 5611-A2-compatible); 2 MB buffered SRAM 3 GB DDR3 1066 DIMM; 500 GB HDD SATA DVD+-R+-RW; 2x PCI free Windows 7 Ultimate 32 bit SP1, MUI (de, en, fr, es, it) without expansion (software)

General information	
Product type designation	IPC677C
Display	
Design of display	12" TFT touch
Screen diagonal	12 in
Resolution (pixels)	
● Horizontal image resolution	800 pixel
● Vertical image resolution	600 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Keyboard	
● Function keys	No
Touch operation	
● Design as touch screen	Yes
Installation type/mounting	
Mounting	For horizontal and vertical mounting
Design	Panel PC, built-in unit
central design	Yes
distributed design	No
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	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
Storage	
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
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	

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Slots	
● Number of PCI slots	2
● Number of PCI slots	1
● Number of compact flash slots	1
Interfaces	
Number of industrial Ethernet interfaces	2; onboard
Number of PROFINET interfaces	3; Optional
serial interface	COM1: 1x V.24 (RS 232)
Video interfaces	
● Graphics interface	DVI-I usable for additional display unit (VGA via adapter); color depth 32 bit, 8 to 128 MB Shared Memory
Industrial Ethernet	
● Industrial Ethernet interface	
— 100 Mbps	Yes
— 1000 Mbps	Yes
Interrupts/diagnostics/status information	
LED status display	Yes
Integrated Functions	
Monitoring functions	
● Temperature monitoring	Yes
● Fan	Yes
● Monitoring function via network	Optional
Degree and class of protection	
IP degree of protection	IP20
IP (at the front)	IP65 (on front) to EN60529 and NEMA4
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
Use in hazardous areas	
● FM Class I Division 2	No
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	
● min.	5 °C
● max.	50 °C
Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °C
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/s² (1 g)
Operating systems	
pre-installed 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
without operating system	Yes
pre-installed operating system	
● Windows XP Professional	Yes

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● Windows 7	Yes; Ultimate 32 bit or 64 bit
Dimensions	
Width of the housing front	400 mm
Height of housing front	310.3 mm
Mounting cutout, width	368 mm
Mounting cutout, height	290 mm
mounting depth	126 mm
Weights	
Weight, approx.	13 kg

Approvals / Certificates

General Product Approval			EMV	For use in hazard-ous locations	Maritime application
Miscellaneous		China RoHS			

Maritime application			Dangerous goods		
	CCS (China Classifica-tion Society)	KR (Korean Register of Shipping)	Dangerous goods in-formation	Test Summary Report UN 38.3	Dangerous goods in-formation

Dangerous goods
Test Summary Report UN 38.3

last modified: 6/11/2026

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