SIEMENS

Data sheet 6AV7882-0CA20-1EA0

	SIMATIC IPC277E (Nanopanel PC); 12" Touch TFT; 2x 10/100/1000 Mbps Ethernet RJ45; 1x display port graphic; 1x USB 3.0; 3x USB 2.0; 1x serial (COM 1); CFast slot; 24 V DC power supply Celeron N2807 (2C/2T) 4 GB RAM; WIN Embedded Standard 7E SP1, English; 32 bit 256 GB Eco SSD; without SIMATIC software
General information	
Product type designation	IPC277E
Display	
Design of display	12" TFT touch
Screen diagonal	12 in
Resolution (pixels)	
● Horizontal image resolution	1 280 pixel
● Vertical image resolution	800 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	80 000 h
Control elements	
Touch operation	
● Design as touch screen	Yes; analog, resistive
Installation type/mounting	
Design	Panel PC, built-in unit
central design	Yes
Mounting in portrait format possible	Yes
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
Chipset	SoC
Graphic	
Graphics controller	Integrated
Drives	
SSD	Yes; 256 Eco / 240 / 480 GB
Storage	
Type of memory	DDR3L SO-DIMM
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	
Number of industrial Ethernet interfaces	2; 2x Ethernet (RJ45)
serial interface	1x COM (1x RS 232 / 422 / 485), selectable in the BIOS
Video interfaces	
● Graphics interface	1x DisplayPort
Industrial Ethernet	
● Industrial Ethernet interface	
— 100 Mbps	Yes
— 1000 Mbps	Yes

Subject to change without notice
© Copyright Siemes

Interrupts/diagnostics/status information	
LED status display	No
Integrated Functions	
Monitoring functions	
● Temperature monitoring	Yes
● Fan	No
● Monitoring function via network	Optional
Degree and class of protection	
IP (at the front)	IP65
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
Marine approval	
● Germanischer Lloyd (GL)	Yes; 7", 9", 12" single-touch
● American Bureau of Shipping (ABS)	Yes; 7", 9", 12" ST; 12", 15", 19" MT
● Bureau Veritas (BV)	Yes; 7", 9", 12" ST; 12", 15", 19" MT
● Det Norske Veritas (DNV)	Yes; 7", 9", 12" ST; 12", 15", 19" MT
● Korean Register of Shipping (KRS)	Yes; 7", 9", 12" ST; 12", 15", 19" MT
● Lloyds Register of Shipping (LRS)	Yes; 7", 9", 12" ST; 12", 15", 19" MT
● Nippon Kaiji Kyokai (Class NK)	Yes; 7", 9", 12" ST; 12", 15", 19" MT
● Chinese Classification Society (CCS)	Yes; 7", 9", 12" ST; 12", 15", 19" MT
Ambient conditions	
Ambient temperature during operation	
● min.	0 °C
● max.	50 °C; 19": max. 45 °C
Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °C
Vibrations	
● Vibration resistance during operation acc. to IEC 60068-2-6	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/s²
Operating systems	
pre-installed operating system	Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 E/P, 32-bit / 64-bit
without operating system	Yes; Optional
pre-installed operating system	
● Windows 7	Yes; Ultimate 32 bit or 64 bit
● Windows 10	Yes; Windows 10 IoT Enterprise 2016 LTSB, 64bit, MUI
● Windows 10 Enterprise	Yes; Windows 10 IoT Enterprise 2019 LTSC, 64 bit, MUI
Dimensions	
Width of the housing front	330 mm
Height of housing front	241 mm
Mounting cutout, width	310 mm
Mounting cutout, height	221 mm
mounting depth	73 mm
Weights	
Weight, approx.	2.75 kg
Approvals / Certificates	
General Product Approval	

© Copyright Siemes

Manufacturer Declaration

Miscellaneous

China RoHS

General Product Approval	Maritime application

Maritime application		Dangerous goods	
NK / Nippon Kaiji Kyokai	KR (Korean Register of Shipping)	Dangerous goods information	Test Summary Report UN 38.3

last modified: 6/11/2026

Subject to change without notice
© Copyright Siemes