SIEMENS



Data sheet

6AV7251-3CA04-0FA0

SIMATIC IPC477E PRO fully enclosed IP65; 15" Multitouch (1366 X 768); suitable for pedestal/ extension components (flange at bottom); 4USB (back); w/o USB (front); Ethernet (10/100/1000);

General information			
Product type designation	IPC477E PRO		
Display			
Design of display	TFT widescreen display, LED backlighting		
Screen diagonal	15 in		
Display width	344.2 mm		
Display height	193.5 mm		
Resolution (pixels)			
Horizontal image resolution	1 366 Pixel		
Vertical image resolution	768 Pixel		
Control elements			
Touch operation			
Design as touch screen	Yes; Projective-capacitive		
Installation type/mounting	Installation type/mounting		
Mounting	For mounting on stand or supporting bracket		
Design	Panel PC on pedestal or supporting arm		
Support arm mounting	No		
Stand mounting	Yes; Prepared for pedestal and extension components		
Mounting in portrait format possible	No		
maximum permissible installation angle +/-	±45 °		
Supply voltage			
Type of supply voltage	24 V DC		
Line frequency			
Rated value 50 Hz	Yes		
Rated value 60 Hz	Yes		
Processor			
Processor type	Celeron G3902 (2C/2T, 1.6 GHz, 2 MB Cache); Core i3-6102E (2C/4T, 1.9 GHz, 3 MB Cache); Core i5-6442EQ (4C/4T, 1.9 (2.7) GHz, 6 MB Cache, iAMT); Xeon E3-1505L v5 (4C/8T, 2.0 (2.8) GHz, 8 MB Cache, iAMT)		
Graphic			
Graphics controller	Intel HD graphics controller		

Optical drives	possible as external drive via USB
SSD	Yes; 1x 128 GB, 1x 240 GB SSD, 1x 480 GB SSD
Memory	
Type of memory	DDR4 SO-DIMM
Main memory	4 GB to 16 GB, ECC optional
Capacity of main memory, max.	16 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags),	512 kbyte; 128 KB can be stored in the buffer time
max.	
Hardware configuration	
Slots	
 Number of PCI slots 	0; Different to the built-in unit
 Number of PCI slots 	0; Different to the built-in unit
 Number of compact flash slots 	1; CFast
nterfaces	
Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)
USB port	4x USB 3.0 onboard (rear)
Connection for keyboard/mouse	USB / USB
serial interface	Without / 2x COM (RS 232 / 422 / 485), selectable in the BIOS
Video interfaces	
Graphics interface	2x DisplayPort
Industrial Ethernet	
Industrial Ethernet interface	3x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
nterrupts/diagnostics/status information	
Bus diagnostics	Yes
ntegrated Functions	
Monitoring functions	
Temperature monitoring	Yes
Watchdog	Yes
● Fan	No
Monitoring function via network	Optional
EMC	
Interference immunity against discharge of static elec-	tricity
Interference immunity against discharge of	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air
static electricity	discharge acc. to IEC 61000-4-2
Interference immunity against high-frequency electron	magnetic fields
Interference immunity against high frequency	10 V/m, 80 2 000 MHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m,
	2 2 7 GHz: 10 \/ 10 \Hz 80 MHz acc to IEC 61000 4 6

radiation

 $2 \dots 2.7 \; \text{GHz}; \, \text{10 V}, \, \text{10 kHz} \dots \, \text{80 MHz} \, \text{acc. to IEC 61000-4-6}$

Interference immunity on supply cables Interference immunity on signal cables > 30m Interference immunity against voltage surge asymmetric interference Interference immunity against voltage surge asymmetric interference Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Interference immunity to magnetic fields at 50 Hz Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Enterference emission via line/AC current cables Interference emission via line/AC current cables Interference emission via line/AC current cables Entergere and class of protection IP65 (all-round) IP (at the front) IP (rear) IP65 IP65 Induradads, approvals, certificates CE mark Yes; CE marking / EC Declaration of Conformity Ves CULua yes CULua Yes RCM (formerly C-TICK) Yes RCM (formerly Gost-R) EMC CE, EN 61000-6-4; CISPR 22 Class A; FCC Class A Marine approval Germanischer Lloyd (GL) American Bureau of Shipping (ABS) Pes Individual Conditions Ambient temperature during operation Ambient temperature during operation Ambient temperature during storage/transportation Fig. 20° C Emax. 60° C		
surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m • Interference immunity on signal cables > 30m • Interference immunity against voltage surge • asymmetric interference • symmetric interference • 12 kV acc. to IEC 61000-4-5, surge asymmetric • symmetric interference • 12 kV acc. to IEC 61000-4-5, surge asymmetric interference immunity to magnetic fields • Interference immunity to magnetic fields • Interference immunity to magnetic fields at 50 Hz Enission 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 Engree and class of protection IP65 (all-round) IP65 (all-round) IP66 (all-round) IP66 (all-round) IP67 (all-round) IP68 (all	Interference immunity to cable-borne interference	
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; ±2 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-5; surge asymmetric interference enumunity to magnetic fields Interference immunity to magnetic fields Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference Interference emission via line/AC current cables Interference emission via line/AC current cables IP (at the front) IP (65 fully enclosed) IP (66 fully enclosed) IP (66 fully enclosed) IP (67 fully enclosed) IP (68 fully enclosed) IP (69 fully e	 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
IEC 61000-4-4; burst; length > 3 m Interference immunity against voltage surge • asymmetric interference • symmetric interference • Interference immunity to magnetic fields • Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference • Interference emission via line/AC current cables • Interference emission via	 Interference immunity on signal cables >30m 	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
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Interference immunity to magnetic fields at 50 Hz 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 cables EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A cables EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A cables Engree and class of protection IP65 (all-round) IP65 (all-round) IP66 (all-round) IP68 (all-round) IP65 (all-round) IP68 (all-round) IP68 (all-round) IP68 (all-round) IP68 (all-round) IP68 (all-round) IP68 (all-round) IP66 (all-round) IP68 (all-round) IP66 (all-round) IP66 (all-round) IP68 (all-round) IP66 (all-round) IP65 (all-round) IP66 (all-round) IP65 (all-round) IP66 (all-round) IP66 (all-round) IP66 (all-roun	• symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
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IP (at the front) IP (rear) IP (65 IP (rear)	Degree and class of protection	
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UL approval UL 508 UL 508 CULus RCM (formerly C-TICK) Yes KC approval EAC (formerly Gost-R) EAC (formerly Gost-R) EMC CE, EN 61000-6-4; CISPR 22 Class A; FCC Class A Marine approval Germanischer Lloyd (GL) American Bureau of Shipping (ABS) Det Norske Veritas (DNV) Korean Register of Shipping (KRS) Lloyds Register of Shipping (LRS) Wes Lloyds Register of Shipping (LRS) Mabient temperature during operation Ambient temperature during operation Ambient temperature during storage/transportation min. min. -20 °C max.	Standards, approvals, certificates	
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Ambient temperature during operation • Ambient temperature during operation • min. • max. -20 °C 60 °C	Ambient conditions	
Ambient temperature during storage/transportation • min.	Ambient temperature during operation	
 min. -20 °C max. 60 °C 	Ambient temperature during operation	5 to +45°C
• max. 60 °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 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °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/s² (1 g)
Shock testing	
Shock load during operation	Tested according to IEC 60068-2-27, IEC 60068-2-29: half-sine: 50 m/s² (5 g), 30 ms, 100 shocks per axis
Operating systems	
Operating system	Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10
pre-installed operating system	Yes
without operating system	Yes; Optional
pre-installed operating system	
• Windows 7	Yes; Ultimate 64 bit
 Windows 10 Enterprise 	Yes; Windows 10 Enterprise LTSB 2016, 64-bit, MUI
Dimensions	
Width of the housing front	396 mm
Height of housing front	255 mm; Without basic adapter
Weights	
Panel PC in central design, approx.	6.8 kg
Other	
Warranty period	36 mo; Warranty period
last modified:	10/16/2018