Data sheet

6AV7251-3BA01-0DA0

SIMATIC IPC477E PRO fully enclosed IP65; 15" Multitouch (1366 X 768); suitable for support arm w/o extension components (flange at top); 4USB (back); w/o USB (front); Ethernet (10/100/1000); Core i3-6102E; 3x Gbit Ethernet (IE/PN); 4 GB; without RS 232/RS485; without PCIe; Win Embedded Standard 7 SP1, English, 32-bit, Without replaceable mass storage; 128 GB solid-state drive SATA; Without SIMATIC software 24 V DC industrial power supply

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	
Mounting	For mounting on stand or supporting bracket
Design	Panel PC on pedestal or supporting arm
Support arm mounting	Yes; Suitable for support arm without extension components
Stand mounting	No
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

Drives

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), max.	512 kbyte; 128 KB can be stored in the buffer time

Hardware configuration

Slots

• Number of PCI slots	0; Different to the built-in unit
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• Number of compact flash slots	1; CFast

Interfaces

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

Interrupts/diagnostics/status information

Bus diagnostics	Yes

Integrated Functions

Monitoring functions

• Temperature monitoring	Yes
• Watchdog	Yes
• Fan	No
• Monitoring function via network	Optional

EMC

Interference immunity against discharge of static electricity

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• 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, 80 ... 2 000 MHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m, 2 ... 2.7 GHz; 10 V, 10 kHz ... 80 MHz acc. to IEC 61000-4-6
Interference immunity to cable-borne interference	
• 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
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	
IP65 (all-round)	Yes; IP65 fully enclosed
IP (at the front)	IP65
IP (rear)	IP65

Standards, approvals, certificates	
CE mark	Yes; CE marking / EC Declaration of Conformity
UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EMC	CE, EN 61000-6-4; CISPR 22 Class A; FCC Class A
Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Det Norske Veritas (DNV)	Yes
• Korean Register of Shipping (KRS)	Yes
• Lloyds Register of Shipping (LRS)	Yes

Ambient conditions	
Ambient temperature during operation	
• Ambient temperature during operation	5 to +45°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 2016 LTSB, 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
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