SIEMENS

Data sheet

6AV7251-5EC07-0DA0

SIMATIC IPC477E PRO fully protected IP65; 19" multi-touch (1366 x 768); for support arm (not expandable, flange top), 4 USB (back); without USB (front); Ethernet (10/100/1000 Core i5-6442EQ; 3x Gbit Ethernet (IE/PN); 16 GB; without RS 232/RS485; without PCIe; Windows 10 IoT Enterprise 2016 LTSB (64-bit) for Celeron/I3/I5; Without replaceable mass storage; 256 GB Eco SSD; Without SIMATIC software 24 V DC industrial power supply

Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	19 in
Display width	409.8 mm
Display height	230.4 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
Mains buffering	
Mains/voltage failure stored energy time	20 ms
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)
Chipset	Intel C236 / Intel H110
Graphic	
Graphics controller	Intel HD graphics controller
Drives	
SSD	Yes; ≥ 128 GB optional
Memory	
Type of memory	DDR4-2400 SO-DIMM
Main memory	4 / 8 / 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
 Number of PCI slots 	0; Different to the built-in unit
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	

	0.00
Graphics interface	2x DisplayPort
Industrial Ethernet	Ov. Ethograph (D.145)
Industrial Ethernet interface	3x Ethernet (RJ45)
— 100 Mbps — 1000 Mbps	Yes Yes
Interrupts/diagnostics/status information	res
Bus diagnostics	Yes
Integrated Functions	165
Monitoring functions	
Temperature monitoring	Yes
Watchdog	Yes
• Fan	No
Monitoring function via network	Optional
EMC	
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC
electricity	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) Standards, approvals, certificates	IP65
	Von
CE mark CSA approval	Yes Yes
UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
EMC	CE, EN 61000-6-4; CISPR 22 Class A; FCC Class A
Use in hazardous areas	
ATEX Zone 2	Yes; Optional
• IECEx Zone 2	Yes; Optional
• cULus Class I Zone 2, Division 2	Yes; Optional
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	
• min.	0°C
• max.	45 °C
Ambient temperature during storage/transportation	

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: 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 pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 without operating system Pre-installed operating system Windows 7 Yes; Optional re-installed operating system Ves; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front 462 mm Height of housing front Policy 1 and 2 mm Weight Language Policy 2 mm; Without basic adapter Weight Language Policy 2 mm; Without basic adapter Weight Language Policy 2 mm; Without basic adapter	• min.	-20 °C	
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 2-6 Shock testing Shock load during operation Tested according to IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m//s² (1 g) Tested according to IEC 60068-2-7, IEC 60068-2-29: half-sine: 50 m/s² (5 g), 30 ms, 100 shocks per axis Operating systems pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 without operating system Ves; Optional pre-installed operating system Windows 7 Yes; Ultimate 64 bit Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front 462 mm Height of housing front Weights	• max.	60 °C	
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 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 pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 without operating system Ves; Optional pre-installed operating system Windows 7 Yes; Ultimate 64 bit Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front Weights	Relative humidity		
Vibration resistance during operation acc. to IEC 60068-2-6 1 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 pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 without operating system Ves; Optional pre-installed operating system Windows 7 Windows 10 Enterprise Yes; Ultimate 64 bit Ves; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front 292 mm; Without basic adapter Weights	Relative humidity	at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no	
2-6 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 pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 without operating system Yes; Optional pre-installed operating system Windows 7 Yes; Ultimate 64 bit Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front 292 mm; Without basic adapter Weights	Vibrations		
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 pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 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 Height of housing front 292 mm; Without basic adapter Weights			
Operating systems pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 Without operating system Pre-installed operating system Windows 7 Windows 7 Windows 10 Yes; Optional Yes; Ultimate 64 bit Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front 292 mm; Without basic adapter Weights	Shock testing		
pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 Without operating system Pre-installed operating system Windows 7 Windows 7 Windows 10 Enterprise Yes; Ultimate 64 bit Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front 292 mm; Without basic adapter Weights	Shock load during operation		
E/P 32-bit / 64-bit, Windows 10 without operating system pre-installed operating system Windows 7 Windows 10 Enterprise Yes; Ultimate 64 bit Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front Weights	Operating systems		
pre-installed operating system	pre-installed operating system		
Windows 7 Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front Weights Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI 292 mm; Without basic adapter	without operating system	Yes; Optional	
● Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Dimensions Width of the housing front Height of housing front 292 mm; Without basic adapter Weights	pre-installed operating system		
Dimensions Width of the housing front Height of housing front Weights 462 mm 292 mm; Without basic adapter	Windows 7	Yes; Ultimate 64 bit	
Width of the housing front Height of housing front Weights 462 mm 292 mm; Without basic adapter	 Windows 10 Enterprise 	Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI	
Height of housing front 292 mm; Without basic adapter Weights	Dimensions		
Weights	Width of the housing front	462 mm	
	Height of housing front	292 mm; Without basic adapter	
Weight approx	Weights		
vveigiti, approx.	Weight, approx.	8.2 kg	

last modified:

12/9/2021