SIEMENS

Data sheet

6AV7251-5FH03-0GA0

SIMATIC IPC477E PRO fully protected IP65; 19" multi-touch (1366 x 768); for supporting foot (expandable, flange at bottom), 4 USB (back); without USB (front); Ethernet (10/100/1000 Core i5-6442EQ; 3x Gbit Ethernet (IE/PN); 16 GB with NVRAM; without RS 232/RS485; without PCIe; Win Embedded Standard 7 P SP1, MUI, 64-bit, multi-touch; Without replaceable mass storage; 480 GB solid-state drive SATA Without SIMATIC software 24 V DC industrial power supply

General information	drive SATA Without SIMATIC software 24 V DC industrial power supply
	IPC477E PRO
Product type designation Display	IFU+1/E PRU
	TET wide come disable. LED be alliable as
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	19 in
Display width	409.8 mm
Display height	230.4 mm
Resolution (pixels)	4 000
Horizontal image resolution	1 366 pixel
Vertical image resolution	768 pixel
Control elements	
Touch operation	V 2 1 11
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	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
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	
Optical drives	possible as external drive via USB
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	00,10
Retentive data area (incl. timers, counters, flags), max.	512 khyte: 128 KB can be stored in the buffer time
	512 kbyte; 128 KB can be stored in the buffer time
Hardware configuration	
Slots	Or Different to the built in unit
Number of PCI 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	0.0.5%
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	
 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	Griz, 10 V, 10 Kriz 60 Miriz acc. to IEC 01000-4-0
•	±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge
 Interference immunity on supply cables 	symmetric; ±2 kV acc. to IEC 61000-4-4, burst, ±1 kV acc. to IEC 61000-4-5, surge
 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
CSA approval	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	

max. 45 °C Ambient temperature during storage/transportation imin20 °C max. 60 °C Relative humidity 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: 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 Fig 32-bit / 64-bit, Windows 10 without operating system Yes; Optional pre-installed operating system Windows 7 Windows 7 Yes; Ultimate 64 bit Yes; Windows 10 Enterprise Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Weights Weight, approx. 8.2 kg	• min.	0 °C	
 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 pre-installed operating system Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10 yes: Optional pre-installed operating system Windows 7 Yes: Ultimate 64 bit Windows 10 Enterprise Accessories Accessories Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Weights 	• max.	45 °C	
max. Relative humidity Relative humidity Relative humidity 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: 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 Yes; Optional pre-installed operating system Yes; Optional pre-installed operating system Yes; Ultimate 64 bit Ves; Windows 7 Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Weights	Ambient temperature during storage/transportation		
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 2-6 2-6 30 m/s² (1 g) 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) 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 Yes; Optional pre-installed operating system Yes; Ultimate 64 bit Windows 7 Yes; Ultimate 64 bit Swindows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Weights	• min.	-20 °C	
Relative humidity Tested according to 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 Wirdows 7 Yes; Optional pre-installed operating system Ves; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the 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 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// 32-bit / 64-bit, Windows 10 without operating system • Windows 7 Yes; Optional pre-installed operating system • Windows 7 Yes; Ultimate 64 bit Yes; Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Weights	Relative humidity		
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 Ves; Ultimate 64 bit Yes; Windows 10 Enterprise Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front 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 Pre-installed operating system Windows 7 Yes; Optional Pre-installed operating system Windows 10 Enterprise Service Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front 292 mm; Without basic adapter	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 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 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) 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 Enterprise Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front 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 Yes; Optional pre-installed operating system Windows 7 Windows 7 Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Weights	Shock load during operation		
E/P 32-bit / 64-bit, Windows 10 without operating system yes; Optional pre-installed operating system • Windows 7 • Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI 462 mm Height of housing front 292 mm; Without basic adapter	Operating systems		
pre-installed operating system	pre-installed operating system		
	without operating system	Yes; Optional	
Windows 10 Enterprise Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front 462 mm Height of housing front 292 mm; Without basic adapter Weights	pre-installed operating system		
Accessories Accessory components Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0) Dimensions Width of the housing front Height of housing front Weights 462 mm 292 mm; Without basic adapter	Windows 7	Yes; Ultimate 64 bit	
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Dimensions Width of the housing front 462 mm Height of housing front 292 mm; Without basic adapter Weights	Accessories		
Width of the housing front Height of housing front Weights 462 mm 292 mm; Without basic adapter	Accessory components	Basic adapter for mounting (MLFB: 6AV7674-1KA00-0AA0)	
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. 8.2 kg	Weights		
	Weight, approx.	8.2 kg	

6/25/2021

last modified: