Data sheet 6AV7251-1GA07-0FA0

SIMATIC IPC477E PRO fully enclosed IP65; 19" Multitouch (1366 x 768); suitable for support arm and extension components (round tube); 4USB (back); w/o USB (front); Ethernet (10/100/1000); Celeron G3902E; 3x Gbit Ethernet (IE/PN); 4 GB; without RS 232/RS485; without PCIe; Windows 10 IoT Enterprise 2016 LTSB (64-bit) for Celeron/I3/I5; Without replaceable mass storage; 240 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	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 and extension components (please refer to manual)
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	
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	
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	
Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc.
electricity	to IEC 61000-4-2
Interference immunity against high-frequency electromagnetic	
 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
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	Voc. Ontional
ATEX Zone 2 IECEx Zone 2	Yes; Optional Yes; Optional
cULus Class I Zone 2, Division 2	Yes; Optional
COLUS Class I Zone 2, Division 2 Marine approval	i 69, Optional
Germanischer Lloyd (GL)	Yes
Germanisoner Eloya (OL)	100

 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	0 °C 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 $^{\circ}$ C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 $^{\circ}$ 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/s 2 (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
Accessories	
Accessory components	6AV7674-1KF00-0AA0 - Flange mount for installation (refer to manual)
Dimensions	
Width of the housing front	462 mm
Height of housing front	292 mm
Weights	
Weight, approx.	8.8 kg
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