

The perfect solution for every requirement

SIMATIC IPC: all advantages at a glance

- Customized solution**
Always the right configuration for your requirements
- Efficient from the very start**
Integrated engineering with Totally Integrated Automation
- Quality guarantees your success**
Developed and built for industry
- For Today and Tomorrow**
SIMATIC IPCs combine innovation and continuity

- On-site with everything in view**
Industrial Flat Panels, Thin Clients, and Tablet PCs
- Ergonomic operation**
Fast, intuitive operator panels with glass fronts

- Tailored to your application**
Device versions for special requirements

- A home-field advantage in the digital factory**
Varied application options for SIMATIC IPCs
- Successful applications**
SIMATIC IPC: examples of concrete applications

- Always by your side**
Service and support for SIMATIC IPCs



New product: SIMATIC IPC127E

Industrial PCs for the Digital Factory
Higher performance, quality and sustainability with SIMATIC IPC

siemens.com/ipc

	SIMATIC IPC427E		SIMATIC IPC477E			
	Box PC	Panel PC, 15" Touch	Panel PC, 19" Touch	Panel PC, 22" Touch	Panel PC, 24" Touch	General features
	–	Widescreen (1280 x 800)	Widescreen (1366 x 768)	Widescreen (1920 x 1080)	Widescreen (1920 x 1080)	Resolution in pixels
	Intel Celeron G3902E (2C/2T, 1.6 GHz, 2 MB cache); Intel Core i3 6102E (2C/4T, 1.90 GHz, 3 MB cache); Intel Core i5-6442EQ (4C/4T, 1.9 (2.7) GHz, 6 MB cache); Intel Xeon Processor E3-1505L v5 (4C/8T, 2.0 (2.8) GHz, 8 MB cache)					Processor
	4 GB, 8 GB or 16 GB; 512 KByte NVRAM optional					Main memory
	Up to 2 x PCIe cards (optional); (1 x PCIe x 4 and 1 x PCIe x 1); max. 6 W/12 W					Free expansion slots
	Windows Embedded Standard 7 (E/P), 32-bit/64-bit; Windows 7 Ultimate, MUI ¹⁾ , 64-bit; Windows 10 Enterprise LTSB 2016					Operating systems (preinstalled and activated)
	Packages with WinCC RT V7, WinCC RT Professional, WinCC RT Advanced, SIMATIC Software Controller					Packages/bundles
	24 V DC; 19.2 ... 28.8 V; isolated / max. 15 ms (in acc. with NAMUR); On/Off switch					Power supply / max. power consumption
	–	Up to 80,000 h ²⁾ ; dimmable from 0 to 100%	Up to 50,000 h ²⁾ ; dimmable from 0 to 100%	Up to 30,000 h ²⁾ ; dimmable from 0 to 100%	Up to 30,000 h ²⁾ ; dimmable from 0 to 100%	MTBF backlighting
	CFast 30 GB (with external access); SSD 240/480 GB; HDD 320 GB					Drives
	–					Mass storage
	Can optionally be connected through ext. drive via USB					Optical drives
	PROFINET RT via Ethernet					Interfaces
	3 x 10/100/1000 Mbps (RJ45); teaming					Fieldbus
	Rear: 4 x USB 3.0; Front: 1 x USB 3.0 (Singletouch exclusive)					Ethernet
	4 x USB 3.0	2 x RS 232/RS 485/RS 422 switchable in the BIOS, optional			–	USB
	–	2 x DisplayPort			–	Serial/parallel
	Temperature; watchdog; HDD; CFast; SSD; CMOS battery (alarm locally by means of SIMATIC IPC DiagBase software)					Graphics interface
	System monitoring: Operating hours counter for preventive maintenance, maintenance mode, networking (LAN), SNMP and OPC interface (optionally via SIMATIC IPC DiagMonitor software) / remote access via Intel AMT Core i5 or higher and via SIMATIC IPC Remote Manager					Monitoring / diagnostics functions
	IP20 in accordance with IEC 60529/EN 61000-6-3; EN 61000-6-4; CISPR220 Class B; FCC Class A					Basic functionality
	IP65 (at the front) in accordance with IEC 60529/EN 61000-6-4; CISPR220 Class B; FCC Class A; IP20 (at the rear)					Advanced functions/remote access
	5 – 9 Hz: 3.5 mm; 9 – 500 Hz: 9.8 ms ²⁾ (approx. 1 g) when operated with CFast/SSD					Ambient conditions
	150 ms ²⁾ ; 11 ms (approx. 15 g) when operated with CFast/SSD					Degree of protection/EMC
	Up to 80% at 25 °C (no condensation)					Vibration during operation ³⁾
	0 – 55 °C					Shock load during operation ⁴⁾
	0 – 50 °C					Relative humidity ⁵⁾
	0 – 45 °C					Ambient temperature in continuous operation at full processor load
	0 – 45 °C					Certification/EU directives
	CE; cULus (508); ATEX/IECEx Cat 3G Zone 2, shipbuilding approvals ⁶⁾ ; WEEE/RoHS; C-Tick					Dimensions
	–	415 x 310 mm	483 x 337 mm	560 x 380 mm	–	Operator panel (W x H) Singletouch
	–	398 x 257 mm	464 x 294 mm	529 x 331 mm	585 x 363 mm	Operator panel (W x H) Multitouch
	Basic device: approx. 262 x 133 x 55.5 mm; Depth with 1 x PCIe/2 x PCIe expansion: 85 mm/105.3 mm	395 x 290 x 83 mm	464 x 318 x 83 mm	542 x 360 x 83 mm	–	Installation dimensions (W x H x D) Singletouch
	–	382 x 241 x 83 mm	448 x 278 x 83 mm	513 x 315 x 83 mm	569 x 347 x 83 mm	Installation dimensions (W x H x D) Multitouch
	–	–	–	–	–	Base version (W x H x D)
	–	–	–	–	–	Extended version (W x H x D)

	SIMATIC Panel PC Ex OG			SIMATIC HMI Panel PC Ex NG		SIMATIC HMI Thin Client Ex NG		SIMATIC PRO Geräte			SIMATIC Industrial Thin Client				SIMATIC Industrial Flat Panel																																
General features	15"/21.5" Multitouch			22" Touch		24" Touch		SIMATIC IPC477E PRO 15"/19"/22" Multitouch			SIMATIC ITP PRO 19"/22" Multitouch				SIMATIC Industrial Thin Client				SIMATIC Industrial Flat Panel				General features																								
Resolution in pixels	15": 4:3 (1024 x 768) 21.5": 16:9 (1920 x 1080)			16:10 (1680 x 1050)		16:9 (1920 x 1080); 16:10 (1920 x 1200)		15": widescreen (1280 x 800) 19": widescreen (1366 x 768) 22": widescreen (1920 x 1080)			Widescreen (1280 x 800)				ST widescreen (1280 x 800) MT widescreen (1280 x 800)				ST widescreen (1366 x 768) MT widescreen (1920 x 1080)				Resolution in pixels																								
Max. distance to computer	–			–		–		Unlimited via Ethernet			Unlimited via Ethernet				Standard: 5 m				Standard: 5 m; extended: 30 m				Max. distance to computer																								
Processor	Intel Core i7-3517UE with 1.7 GHz			Intel Atom E3845		Intel Atom E3845		Intel Celeron 827E 1.4 GHz; 1.5 MB SLC or Intel Core i3-3217UE 1.6 GHz; 3 MB SLC or Intel Core i7-3517UE 1.7 (2.8) GHz; 4 MB SLC			Intel Celeron (1.2 GHz)				–				Processor																												
Main memory	4 GB or 8 GB RAM			4 GB RAM		4 GB RAM		1 GB, 2 GB, 4 GB or 8 GB; 512 KB NVRAM optional			–				–				Main memory																												
Operating systems (preinstalled and activated) / supported protocols	Windows 7 Ultimate MUI ¹⁾ / Windows Embedded Standard 7 P			Windows 7 Ultimate, Windows 7 Embedded		Win 10 Enterprise + Remote Firmware V5		Windows Embedded Standard 7 (E/P), 32-bit/64-bit; Windows 7 Ultimate MUI ¹⁾ , 32-bit/64-bit; Windows 10 Enterprise			Closed Linux with integrated communication protocols: Smb@Access, RDP, VNC, SINUMERIK, WinCC-OA, Web (HTML5); Designo, JAVA, CITRIX Client (possible restriction with MT usage)				–				Operating systems (preinstalled and activated) / supported protocols																												
Power supply / max. power consumption	DC 24 V; 4.6 A (6.9 A) ¹⁰⁾ ; AC 110 V; 1.1 A (1.7 A) ¹⁰⁾ ; AC 230 V; 0.6 A (0.8 A) ¹⁰⁾			DC 24/AC 100 – 240V		DC 24/AC 100 – 240V		DC 24 V (DC 19.2 – 28.8 V)			DC 24 V; +19.2 V – +28.8 V				DC 24 V / ca. 35 W				DC 24 V / ca. 28 W				DC 24 V / ca. 36 W				DC 24 V / ca. 32 W				DC 24 V / ca. 53 W				24 V DC; 19.2 ... 28.8 V, approx. 40 W; extended version additionally 100–240 V AC, 50/60 Hz	Power supply / max. power consumption											
MTBF backlighting	–			–		–		Bis zu 50.000 h ²⁾			Up to 50,000 h ²⁾ ; dimmable from 0 – 100%				Up to 50,000 h ²⁾ ; 10 to 100% dimming				Up to 80,000 h ²⁾ ; dimmable from 0 to 100%				MTBF backlighting																								
Drives	SSD with 80 GB, 160 GB, 240 GB, 300 GB, 480 GB			32 GB SSD/64 GB SSD/128 GB SSD		64 GB SSD		CFast up to 16 GB/SSD 80 GB or 160 GB; CFast up to 16 GB (accessible from outside)			–				–				Drives																												
Mass storage	–			–		–		–			–				–				Mass storage																												
Ports	2 x Ethernet 10/100/1000 Base Tx (Ex e) or FO 100 Base Fx 100 Mbit (Ex op is)			1 x GB LWL or 2 x 100 Mbit copper		1 x GB LWL or 2 x 100 Mbit copper		2 x 10/100/1000 Mbps (RJ45); teaming; Fieldbus: PROFIBUS DP/MPI isolated; PROFINET RT via Ethernet (optional); PROFINET IRT (optional)			2 x Ethernet 10/100/1000 Mbps (RJ45)				2x Ethernet 10/100/1000 Mbps (RJ45)				–				Ports																								
Ethernet	1 x USB (Ex e), 3 x USB (Ex ia)			2 x USB (Ex ia) 1 x USB (Ex e)		2 x USB (Ex ia) 1 x USB (Ex e)		Rear: 4 x USB 3.0			Rear: 2 x USB 2.0				Rear: 2 x USB 2.0/MT: 4 x USB 2.0				Extended Version: 2 x USB 2.0 (at the rear)				USB																								
USB	1 x RS 232/RS 422/RS 485 (Ex e)			1 x RS 232 (Ex e)		1 x RS 232 (Ex e)		1 x RS 232			–				–				–				Serial/parallel																								
Serial/parallel	DVI out (Ex e)			–		–		1 x DVI, 1 x DisplayPort			–				–				1 x DVI-D; 1 x DisplayPort (partially 1 x Ethernet and 1 x DisplayPort)				Graphics interface																								
Graphics interface	IP66/4X all-round			IP66 (at the front); IP65 (at the rear)		IP66 (at the front); IP65 (at the rear)		All-round IP65 protection/NEMA 4X			All-round IP65 protection/NEMA 4X				IP65 (front)				IP65 (front)				Ambient conditions																								
Ambient conditions	EN 61000-6-2:2005 + AC:2005 EN 61000-6-4:2007 + A1:2011			EN 61000-6-2:2006; EN 61000-6-4: 2007		EN 61000-6-2:2006; EN 61000-6-4: 2007		EN 61000-6-4; CISPR 22 Class A; FCC Class A			EN 61000-6-2; EN 61000-6-4				EN 61000-6-2; EN 61000-6-4				CE; EN 61000-6-4				CE; EN 61000-6-4; EN 61000-6-2				Degree of protection																				
EMV	3 – 22 Hz: 1 mm; 22 – 500 Hz: 9.8 ms ²⁾ (1 g) ³⁾			5 bis 13,2 Hz: ±1 mm 13,2 bis 100 Hz: ±0,7 g		5 bis 13,2 Hz: ±1 mm 13,2 bis 100 Hz: ±0,7 g		5 – 8,4 Hz: 3,5 mm 8,4 – 200 Hz: 9,8 ms ²⁾ (1 g) 50 ms ²⁾ ; 30 ms (15 g); 11 ms			5 – 8,4 Hz: 3,5 mm 8,4 – 500 Hz: 9,8 ms ²⁾ (1 g) (15 g); 11 ms				5 – 8,4 Hz: 3,5 mm 8,4 – 500 Hz: 9,8 ms ²⁾ (1 g) (15 g); 11 ms				10 – 58 Hz: 0,0375 mm; 58 – 200 Hz: 9,8 ms ²⁾ (1 g)				10 – 58 Hz: 0,0375 mm; 58 – 200 Hz: 9,8 ms ²⁾ (1 g)				Vibration during operation ³⁾																				
Vibration during operation ³⁾	150 ms ²⁾ (ca. 15 g); 11 ms			–		–		5 – 85% at 30 °C, no condensation ⁴⁾			10 – 90% at 30 °C, no condensation ⁴⁾				50 ms ²⁾ (5 g); 30 ms				150 ms ²⁾ (ca. 15 g); 11 ms				Shock load during operation ⁴⁾																								
Shock load during operation ⁴⁾	>95% at +65 °C (no condensation)			10 – 90% at +40 °C, no condensation		10 – 90% at +40 °C, no condensation		0 – 45 °C			0 – 45 °C				0 – 50 °C				0 – 45 °C				Relative humidity ⁵⁾																								
Relative humidity ⁵⁾	–10 °C (opt. –40 °C) ... 65 °C			–20 °C ... +60 °C –30 °C ... +50 °C (with heating option)		–20 °C ... +60 °C –30 °C ... +50 °C (with heating option)		0 – 45 °C			0 – 45 °C				0 – 50 °C				0 – 45 °C				Ambient temp. in continuous operation at full processor load																								
Ambient temp. in continuous operation at full processor load	Gas: II 2 (1) G Ex e q [ia op is Ga] IIC 14 Gb; Staub: II 2 (1) D Ex tb [ia op is Da] IIC T115 °C Db			IEC, ATEX Zonen 1, 21, 2, 22; CE, NEC, CSA, TR-EAC KGS DNV/GL		IEC, ATEX Zonen 1, 21, 2, 22; CE, NEC, CSA, TR-EAC KGS DNV/GL		CE, cULus, FCC, KC, EAC, RCM, ATEX/IECEx (in preparation), cFmus, Marine			CE, cULus, FCC, RCM, KC, EAC, cFmus, shipbuilding				CE, cULus, FCC, RCM, KC, EAC, cFmus				CE; cULus; C-Tick; KCC; FM				CE; cULus/cULus Hazardous Location; partially or optionally: ATEX; C-Tick; Marine, Ex, KC				Certification/EU directives																				
Certification/EU directives	–			660 x 475		660 x 475		–			–				330 x 241				330 x 241				416 x 298				Dimensions																				
Dimensions	–			–		–		15": 396 x 255; 19": 475 x 296; 22": 527 x 329			19": 475 x 296; 22": 527 x 329				19": 475 x 296; 22": 527 x 329				330 x 241				398 x 257				464 x 294				529 x 331				Operator panel (W x H) Singletouch in mm												
Operator panel (W x H) Singletouch in mm	15": 380 x 394 x 137 21.5": 553 x 458 x 141			615 x 435 x 110		615 x 435 x 110		–			–				310 x 221 x 82				396 x 291 x 75				465 x 319 x 75				542 x 362 x 75				308 x 219 x 71,1				399 x 291 x 63				465 x 319 x 63				542 x 362 x 63				Operator panel (W x H) Multitouch in mm
Operator panel (W x H) Multitouch in mm	–			–		–		–			–				–				–				–				–				–				–				Installation dimensions (W x H x D) Singletouch in mm								
Installation dimensions (W x H x D) Singletouch in mm	–			–		–		–			–				–				–				–				–				–				–				–								