

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	
	Can optionally be connected through ext. drive via USB				Mass storage	
	PROFINET RT via Ethernet				Optical drives	
	3 x 10/100/1000 Mbps (RJ45); teaming				Interfaces	
	Rear: 4 x USB 3.0; Front: 1 x USB 3.0 (Singletouch exclusive)				Fieldbus	
4 x USB 3.0	2 x RS 232/RS 485/RS 422 switchable in the BIOS, optional				Ethernet	
	2 x DisplayPort				USB	
	Temperature; watchdog; HDD; CFast; SSD; CMOS battery (alarm locally by means of SIMATIC IPC DiagBase software)				Serial/parallel	
	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				Graphics interface	
	IP20 in accordance with IEC 60529/EN 61000-6-3; EN 61000-6-4; CISPR220 Class B; FCC Class A				Monitoring/diagnostics functions	
	IP65 (at the front) in accordance with IEC 60529/EN 61000-6-4; CISPR220 Class B; FCC Class A; IP20 (at the rear)				Basic functionality	
	5 - 9 Hz: 3.5 mm; 9 - 500 Hz: 9.8 ms ²⁾ (approx. 1 g) when operated with CFast/SSD				Advanced functions/remote access	
150 ms ²⁾ ; 11 ms (approx. 15 g) when operated with CFast/SSD	50 ms ²⁾ ; 30 ms (approx. 5 g) when operated with CFast/SSD				Ambient conditions	
Up to 80% at 25 °C (no condensation)	Up to 85% at 30 °C (no condensation)				Degree of protection/EMC	
0 - 55 °C	0 - 50 °C	0 - 45 °C	0 - 45 °C	0 - 45 °C	Vibration during operation ³⁾	
	CE; cULus (508); ATEX/IECEx Cat 3G Zone 2, shipbuilding approvals ⁴⁾ ; WEEE/RoHS; C-Tick				Shock load during operation ⁴⁾	
	415 x 310 mm	483 x 337 mm	560 x 380 mm		Relative humidity ⁵⁾	
	398 x 257 mm	464 x 294 mm	529 x 331 mm	585 x 363 mm	Ambient temperature in continuous operation at full processor load	
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		Certification/EU directives	
	382 x 241 x 83 mm	448 x 278 x 83 mm	513 x 315 x 83 mm	569 x 347 x 83 mm	Dimensions	
					Operator panel (W x H) Singletouch in mm	
					Operator panel (W x H) Multitouch in mm	
					Installation dimensions (W x H x D) Singletouch in mm	
					Base version (W x H x D)	
					Extended version (W x H x D)	

SIMATIC IPCs and Thin Clients for special requirements

	SIMATIC Panel PC Ex OG	SIMATIC HMI Panel PC Ex NG	SIMATIC HMI Thin Client Ex NG	SIMATIC PRO Geräte		
General features	15"/21.5" Multitouch	22" Touch	24" Touch	22" Touch	24" Touch	
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)	16:10 (1680 x 1050)	16:9 (1920 x 1080); 16:10 (1920 x 1200)	
Max. distance to computer				Unlimited via Ethernet		
Processor	Intel Core i7-3517UE with 1.7 GHz	Intel Atom E3845		Intel Atom E3845		
Main memory	4 GB or 8 GB RAM	4 GB RAM		4 GB RAM		
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		
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/AC 100 - 240V	DC 24/AC 100 - 240V	
MTBF backlighting				Bis zu 50.000 h ²⁾		
Drives						
Mass storage	SSD with 80 GB, 160 GB, 240 GB, 300 GB, 480 GB	32 GB SSD/64 GB SSD/128 GB SSD		64 GB SSD		
Ports						
Ethernet	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		
USB	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)		
Serial/parallel	1 x RS 232/RS 422/RS 485 (Ex e)	1 x RS 232 (Ex e)		1 x RS 232 (Ex e)		
Graphics interface	DVI out (Ex e)					
Ambient conditions						
Degree of protection	IP66/4X all-round	IP66 (at the front); IP65 (at the rear)		All-round IP65 protection/NEMA 4X		
EMV	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 61000-6-4; CISPR 22 Class A; FCC Class A		
Vibration during operation ³⁾	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 - 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		
Shock load during operation ⁴⁾	150 ms ²⁾ (ca. 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		
Relative humidity ⁵⁾	>95% at +65 °C (no condensation)	10 - 90% at +40 °C, no condensation		5 - 85% at 30 °C, no condensation ⁶⁾ 0 - 45 °C		
Ambient temp. in continuous operation at full processor load	-10 °C (opt. -40 °C) ... 65 °C	-20 °C ... +60 °C -30 °C ... +50 °C (with heating option)		10 - 90% at 30 °C, no condensation ⁶⁾ 0 - 45 °C		
Certification/EU directives	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		CE, cULus, FCC, KC, EAC, RCM, ATEX/IECEx (in preparation), cMus, Marine		
Dimensions						
Operator panel (W x H) Singletouch in mm		660 x 475		660 x 475		
Operator panel (W x H) Multitouch in mm						
Installation dimensions Singletouch in mm (W x H x D)		615 x 435 x 110		615 x 435 x 110		

SIMATIC Thin Client & Flat Panel

	SIMATIC Industrial Thin Client				SIMATIC Industrial Flat Panel					
General features	12" Touch	15" Touch	19" Touch	22" Touch	12" Touch	15" Touch or Multitouch 15" Tasten	19" Touch or Multitouch (optional as Ethernetmonitor)	22" Touch or Multitouch (optional as Ethernetmonitor)	General features	
Resolution in pixels	Widescreen (1280 x 800)	Widescreen (1280 x 800) MT (1366 x 768)	Widescreen (1366 x 768) MT (1366 x 768)	Widescreen (1920 x 1080) MT (1920 x 1080)	ST widescreen (1280 x 800)	ST widescreen (1280 x 800) MT widescreen (1920 x 1080)	ST widescreen (1366 x 768) MT widescreen (1920 x 1080)	ST widescreen (1920 x 1080) MT widescreen (1920 x 1080)	Resolution in pixels	
Max. distance to computer	Unlimited via Ethernet				Standard: 5 m; extended: 30 m				Max. distance to computer	
Processor	Intel Celeron (1.2 GHz)								Processor	
Main memory									Main memory	
Operating systems (preinstalled and activated) / supported protocols	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/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	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									Drives	
Mass storage									Mass storage	
Ports									Ports	
Ethernet	2x Ethernet 10/100/1000 Mbps (RJ45)								Ethernet	
USB	Rear: 2 x USB 2.0/MT: 4 x USB 2.0				Extended Version: 2 x USB 2.0 (at the rear)				USB	
Serial/parallel									Serial/parallel	
Graphics interface					1 x DVI-D; 1 x DisplayPort (partially 1 x Ethernet and 1 x DisplayPort)				Graphics interface	
Ambient conditions									Ambient conditions	
Degree of protection	IP65 (front)				IP65 (front)				Degree of protection	
EMV	EN 61000-6-2; EN 61000-6-4				CE; EN 61000-6-4				EMV	
Vibration during operation ³⁾	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⁾	
Shock load during operation ⁴⁾	50 ms ²⁾ (5 g); 30 ms				150 ms ²⁾ (ca. 15 g); 11 ms				Shock load during operation ⁴⁾	
Relative humidity ⁵⁾	5 - 85% at 25 °C (no condensation)				95% at 25 °C (no condensation)				Relative humidity ⁵⁾	
Ambient temp. in continuous operation at full processor load	0 - 50 °C				0 - 50 °C (partially up to 45 °C)				Ambient temp. in continuous operation at full processor load	
Certification/EU directives	CE; cULus; C-Tick; KCC; FM				CE; cULus; cULus Hazardous Location; partially or optionally: ATEX; C-Tick; Marine; Ex, KC				Certification/EU directives	
Dimensions									Dimensions	
Operator panel (W x H) Singletouch in mm	330 x 241	415 x 310	483 x 337	560 x 380	330 x 241	416 x 298	483 x 337	560 x 380	Operator panel (W x H) Singletouch in mm	
Operator panel (W x H) Multitouch in mm									Operator panel (W x H) Multitouch in mm	
Installation dimensions Singletouch in mm (W x H x D)	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	Installation dimensions Singletouch in mm (W x H x D)	