## **SIEMENS**

Data sheet

## 6AG4012-1CA21-0XX0

SIMATIC IPC347E (Rack PC, 19", 4HU); Core I5-4570S (4C/4T, 2.9 (3.6) GHz, 6 MB cache); Interfaces: 2x Gbit Ethernet, 1x DVI-D, 1x VGA, 2x USB on the front, 4x USB on the rear, 1x USB internal, 2x serial, 2x PS/2, audio; 1x 500 GB HDD, internal; 4 GB DDR3 SD-RAM (1x 4 GB), single channel; DVD +/-RW; without operating system; 100/240 V industrial power supply, without line cable



Installation type/mounting	
Mounting	For horizontal rack mounting
Design	Rack PC, 19", 4U
Rack mounting	Yes
Supply voltage	
Type of supply voltage	100 - 240 V AC
Line frequency	
<ul> <li>Rated value 50 Hz</li> </ul>	Yes
• Rated value 60 Hz	Yes
Processor	
Processor type	Core i5-4570S (4C/4T, 2.9 (3.6) GHz, 6 MB Cache)
Drives	
Hard disk	500 GB HDD
Memory	
Type of memory	DDR3-SDRAM
Main memory	4 GB (pre-installed), support up to 16 GB
Capacity of main memory, max.	4 Gbyte

Slots	
free slots	4x PCI, 1x PCIe (x1), 1x PCIe (x8) (2 Lanes), 1x PCIe (x16) (16 Lanes)
iterfaces	
Interfaces/bus type	2x Gbit Ethernet (RJ45)
Number of industrial Ethernet interfaces	2
USB port	2x USB 3.0 rear, 2x USB 2.0 rear, 2x USB 2.0 front, 1x USB 2.0 internal
Connection for keyboard/mouse	2x PS/2
serial interface	2x COM ports (RS 232, RS 422, RS 485)
Multimedia	
Audio In/Out	Yes
Microphone In	Yes
Industrial Ethernet	
Industrial Ethernet interface	2x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
ntegrated Functions Monitoring functions	
Status LEDs	POWER, HDD
ΝΛ(	
MC	4-1
Interference immunity against discharge of static elect	
Interference immunity against discharge of static elect • Interference immunity against discharge of	±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity	±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2
<ul> <li>Interference immunity against discharge of static elect</li> <li>Interference immunity against discharge of static electricity</li> <li>Interference immunity against high-frequency electron</li> </ul>	±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2 magnetic fields
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity	±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2 magnetic fields 10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/ for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7
<ul> <li>Interference immunity against discharge of static elect</li> <li>Interference immunity against discharge of static electricity</li> <li>Interference immunity against high-frequency electron</li> <li>Interference immunity against high frequency</li> </ul>	±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2 magnetic fields 10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/ for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz
<ul> <li>Interference immunity against discharge of static elect</li> <li>Interference immunity against discharge of static electricity</li> <li>Interference immunity against high-frequency electron</li> <li>Interference immunity against high frequency radiation</li> </ul>	<ul> <li>±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2</li> <li>magnetic fields</li> <li>10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/ for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz 80% AM acc. to IEC 61000-4-6</li> <li>±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5</li> </ul>
<ul> <li>Interference immunity against discharge of static elect</li> <li>Interference immunity against discharge of static electricity</li> <li>Interference immunity against high-frequency electron</li> <li>Interference immunity against high frequency radiation</li> </ul>	<ul> <li>±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2</li> <li>magnetic fields</li> <li>10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/ for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz 80% AM acc. to IEC 61000-4-6</li> <li>±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</li> </ul>
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity Interference immunity against high-frequency electron • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables	<ul> <li>±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2</li> <li>magnetic fields</li> <li>10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/ for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz 80% AM acc. to IEC 61000-4-6</li> <li>±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; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-5, surge asymmetric</li> </ul>
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity Interference immunity against high-frequency electron • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables • Interference immunity on signal cables >30m	
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity Interference immunity against high-frequency electron • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables • Interference immunity on signal cables >30m • Interference immunity on signal cables < 30m	<ul> <li>±4 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2</li> <li>magnetic fields</li> <li>10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/ for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz 80% AM acc. to IEC 61000-4-6</li> <li>±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 ±2 kV acc. to IEC 61000-4-4, burst; length &gt; 30 m; ±2 kV acc. to IEC 61000-4-5, surge; length &gt; 30 m</li> </ul>
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity Interference immunity against high-frequency electron • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables • Interference immunity on signal cables >30m • Interference immunity on signal cables < 30m Interference immunity against voltage surge	$\pm 4 \text{ kV contact discharge acc. to IEC 61000-4-2; } \pm 8 \text{ kV air}$ discharge acc. to IEC 61000-4-2 magnetic fields 10 V/m for 80 - 1 000 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/ for 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 1 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 150 kHz - 80 MHz 80% AM acc. to IEC 61000-4-6 $\pm 2 \text{ kV acc. to IEC 61000-4-6}$ $\pm 2 \text{ kV acc. to IEC 61000-4-4, burst; } \pm 1 \text{ kV acc. to IEC 61000-4-5} surge asymmetric; \\ \pm 2 \text{ kV acc. to IEC 61000-4-4, burst; length > 30 m; \\ \pm 2 \text{ kV acc. to IEC 61000-4-4, Burst}$
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity Interference immunity against high-frequency electron • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables • Interference immunity on signal cables >30m • Interference immunity on signal cables < 30m Interference immunity against voltage surge • asymmetric interference • symmetric interference	
Interference immunity against discharge of static elect • Interference immunity against discharge of static electricity Interference immunity against high-frequency electron • Interference immunity against high frequency radiation Interference immunity to cable-borne interference • Interference immunity on supply cables • Interference immunity on signal cables >30m • Interference immunity on signal cables < 30m Interference immunity against voltage surge • asymmetric interference	

<ul> <li>Interference emission via line/AC current cables</li> </ul>	IEC 61000-6-4, CISPR 22, FCC Class A
Compliance with line harmonic distortion limits	
• Compliance with line harmonic distortion acc. to IEC 61000-3-2, IEC 61000-3-3	Yes; EN 61000-3-2 Class D; EN 61000-3-3
Degree and class of protection	
IP (at the front)	IP20
IP (rear)	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-4:2007 +A1:2011, EN 61000-6-2:2005
Ambient conditions	
Ambient temperature during operation	
<ul> <li>Ambient temperature during operation</li> </ul>	+5 °C to +40 °C
Ambient temperature during storage/transportation	
● min.	-20 °C
• max.	60 °C
Relative humidity	
<ul> <li>Relative humidity</li> </ul>	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 $^{\circ}$ C (no condensation), Storage: 5% to 95% at 25 $^{\circ}$ C (no condensation)
Operating systems	
without operating system	Yes
Mechanics/material	
Enclosure material (front)	
Aluminum	Yes
Dimensions	
Width	430 mm
Height	177 mm
Depth	463 mm
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