

PRODUCT TECHNICAL REFERENCE

6GK1561-2AA00

CP 5612 Communications Processor

Siemens 6GK1561-2AA00 is a SIMATIC NET CP 5612 PCI communications processor. It connects a compatible PG or PC to PROFIBUS or MPI for automation communication, commissioning and diagnostics.

PARAMETER	TECHNICAL VALUE
Manufacturer	Siemens
System family	SIMATIC NET CP 5612
Article number	6GK1561-2AA00
Country	USA
HS code	8537101190

Document scope

PARAMETER	TECHNICAL VALUE
Product identity	Complete article and CP 5612 product family
Host qualification	PCI keying, clock, supply and operating-system support
Network engineering	PROFIBUS or MPI interface, connector and transfer-rate range
Environmental review	Temperature, humidity and enclosure limits
Commissioning record	Installation, diagnostics and return-to-service checks

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1. Host and Network Interface

Exact technical values from the Siemens product record are grouped by function so host compatibility and fieldbus configuration can be checked independently.

PARAMETER	TECHNICAL VALUE
Product family	CP 5612
Product type	Communications processor
Host bus	PCI 32-bit
PCI keying	3.3/5 V universal key
PCI clock	33/66 MHz
Industrial network	PROFIBUS; MPI
Transfer rate	9.6 kbit/s to 12 Mbit/s
Network interfaces	1
Physical interface	RS-485
Connector	9-pin Sub-D socket
Backplane supply	3.3 V DC; 12 V DC
3.3 V tolerance	+/-9%

System roles

1	Connects a compatible programming device or industrial PC to PROFIBUS or MPI.
2	Handles engineering and cyclic communication through one RS-485 network port.
3	Fits a 32-bit PCI slot with 3.3/5 V universal keying and 33/66 MHz operation.
4	Supports configured bus rates from 9.6 kbit/s through 12 Mbit/s.

Interface configuration boundary

PARAMETER	TECHNICAL VALUE
Installed function	One host communications processor
Fieldbus selection	Configure the interface for PROFIBUS or MPI
Physical layer	RS-485 through the 9-pin Sub-D socket
Project control	Preserve the approved node, rate and termination record

2. Power and Environmental Data

Use the power and environmental limits when qualifying the PCI host and cabinet operating conditions.

PARAMETER	TECHNICAL VALUE
12 V tolerance	+/-8%
Current at 3.3 V	0.15 A maximum
Current at 12 V	0.25 A maximum
Power loss	3.5 W
Operating temperature	5 to 55 degC
Storage temperature	-20 to +60 degC
Transport temperature	-20 to +60 degC
Relative humidity	95% at 25 degC; non-condensing
Ingress protection	IP00
Card format	PCI
Same-design cards per PC	1
Operating-system support	32-bit; 64-bit

Interface pairing

PARAMETER	TECHNICAL VALUE
Host	PG/PC with one compatible 32-bit PCI slot
Network	PROFIBUS or MPI over RS-485
Field connector	Approved 9-pin Sub-D bus connector
Software	Configured SIMATIC communication or engineering software

Host acceptance checks

1	Confirm the slot supports the universal-key PCI card format.
2	Confirm both backplane supply rails remain within the stated tolerances.
3	Keep cabinet temperature and humidity inside the stated operating limits.
4	Treat IP00 as open equipment and retain the host enclosure protection.

3. Engineering Applications and Commissioning

PARAMETER	TECHNICAL VALUE
PROFIBUS engineering station	Configuration, diagnostics and controlled access to installed PROFIBUS nodes
MPI commissioning workstation	PG/PC communication with compatible SIMATIC automation equipment
Industrial PC interface	One PCI-based RS-485 communication path for an engineered host
Plant maintenance access	Documented service connection with preserved bus settings and termination

Commissioning sequence

1	Confirm article number and PCI host compatibility.
2	Install under power-off and ESD-controlled conditions.
3	Restore driver binding, bus address and transmission rate.
4	Verify shielding, connector seating and segment termination.
5	Prove communication and retain the as-left record.

Diagnostic review

PARAMETER	TECHNICAL VALUE
Host does not enumerate card	Review PCI seating, slot compatibility and driver state
Network remains offline	Review mode, address, rate, connector and termination
Intermittent communication	Review shield continuity, duplicate address and segment condition
Application does not bind	Review the configured CP 5612 interface assignment

4. Precautions, FAQ and Related Products

1	Verify the complete article number and a compatible 32-bit PCI host slot.
2	Shut down the host, isolate mains power and apply ESD controls before handling.
3	Seat the PCI edge connector squarely and secure the bracket without board stress.
4	Use an approved 9-pin PROFIBUS/MPI connector and preserve shield continuity.
5	Enable RS-485 termination only at the physical ends of the bus segment.

Engineer FAQ

PARAMETER	TECHNICAL VALUE
Which host slot is required?	A compatible 32-bit PCI slot with 3.3/5 V universal keying.
Which networks are supported?	One RS-485 interface can be configured for PROFIBUS or MPI.
What bus-rate range is available?	The specified range is 9.6 kbit/s to 12 Mbit/s.
Which field connector is used?	A 9-pin Sub-D socket is provided for the RS-485 network.
What should be recorded before replacement?	PCI slot, driver assignment, node address, rate, shield and termination state.
How is an ESD-safe replacement performed?	Isolate the host, use approved ESD controls and handle the card by its edges.
What should be checked after installation?	PCI recognition, driver binding, bus settings, connector, shielding and diagnostics.
How many same-design cards are listed per PC?	The Siemens technical data lists one CP 5612 of the same design per PC.

Related Siemens products on Apter Power

MODEL	SERIES ROLE	APTER POWER PAGE
6ES7414-3EM07-0AB0	SIMATIC S7-400 CPU 414-3 PN/DP	Open product page
6EP1434-2BA20	SITOP PSU300S stabilized power supply	Open product page

Manufacturer source record

Siemens CP 5612 technical data for article 6GK1561-2AA00. Source identifier: 6GK1561-2AA00.

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