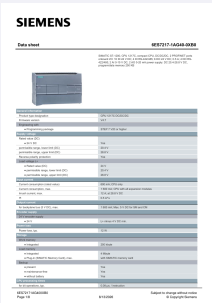


AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

Siemens 6ES7217-1AG40-0XB0

CPU 1217C DC/DC/DC



CPU TYPE	PROFINET PORTS	WORK MEMORY	DC SUPPLY
1217C	2	250 KB	24 V

Siemens 6ES7217-1AG40-0XB0 is the SIMATIC S7-1200 CPU 1217C DC/DC/DC. Its onboard I/O includes ten 24 V digital inputs, four differential digital inputs, six 24 V digital outputs, four differential digital outputs, two voltage inputs and two current outputs. Two Ethernet ports share one integrated PROFINET interface.

01

VERIFIED PRODUCT PARAMETERS

CPU electrical variant	DC/DC/DC
CPU supply range	20.4 to 28.8 V DC
24 V digital inputs	10 onboard channels
Differential digital inputs	4 RS-422/485 channels
24 V digital outputs	6 onboard channels; 0.5 A rated
Differential digital outputs	4 RS-422/485 channels
Analog voltage inputs	2 onboard channels; 0 to 10 V DC
Analog current outputs	2 onboard channels; 0 to 20 mA
PROFINET port arrangement	2 ports on one interface; integrated switch
Integrated work memory	250 KB; current Siemens datasheet

02

ADDITIONAL TECHNICAL DATA

Integrated load memory	4 MB
Signal-module capacity	Maximum 8 SM modules
Communication-module capacity	Maximum 3 CM modules
Backplane power capacity	Maximum 1600 mA at 5 V DC
Engineering requirement	STEP 7 V20 or higher for firmware V4.7

03

SYSTEM ROLE AND APPLICATIONS

The Siemens datasheet dated August 2026 specifies 250 KB of working memory and describes firmware V4.7 with STEP 7 V20 or higher. Match the delivered hardware and firmware to the saved project before replacement. Differential terminals, analog connections and ordinary 24 V I/O have different electrical requirements.

- Receive differential encoder signals: Connect a compatible external encoder to the documented differential input circuit. Verify the receiver common-mode limits, built-in termination and shielded twisted-pair wiring before using the signal in the configured machine function.
- Interface with a differential drive receiver: Use the CPU differential outputs with a compatible motor-drive receiver as shown in the Siemens application example. Match the driver and receiver references and signal requirements; do not wire these terminals as ordinary 24 V load outputs.
- Expose selected data through OPC UA: Use the supported OPC UA server to provide configured data access to a supervisory client. Check the Basic runtime license, firmware, user authentication and security settings, then validate the intended read, write or subscription behavior.

04

OFFICIAL INSTALLATION FACTS

- Isolate the supply and prevent unexpected machine movement before disconnecting the CPU.
- Identify the 24 V supply, sensor supply and functional-earth terminals using the CPU 1217C wiring diagram.
- Separate ordinary digital I/O from the differential input and output pairs; verify receiver references and common-mode limits.
- Use the specified gold X12 connector for analog channels and short unused analog inputs as instructed.

05

OFFICIAL DOCUMENTATION

[Siemens exact-model datasheet 08/13/2026; S7-1200 A5E02486680-AO](#)

AMIKON PRODUCT SUPPORT

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