SIMATIC S7-300

Product Data Sheet

6ES7312-1AE14-0AB0

CPU 312 Processor Module

RATED SUPPLY	PERMITTED SUPPLY	RATED CURRENT CONSUMPTION	TYPICAL NO-LOAD CURRENT
24 V DC	**19.2 to 28.8 V DC**	**650 mA**	**140 mA**

Siemens 6ES7312-1AE14-0AB0 is the CPU 312 processor for SIMATIC S7-300, with an integrated 24 V DC supply interface, 32 kbyte work memory and one MPI port. It uses a SIMATIC Micro Memory Card for load memory, with a documented maximum capacity of 8 Mbyte. Program and data retention is maintained without a backup battery.

01 TECHNICAL DATA

Rated supply	24 V DC
Permitted supply	19.2 to 28.8 V DC
Rated current consumption	650 mA
Typical no-load current	140 mA
Typical inrush current	3.5 A
Typical power loss	4 W
Integrated work memory	32 kbyte
Maximum MMC load memory	8 Mbyte
Bit operation time	0.1 microseconds typical
Word operation time	0.24 microseconds typical

02 ADDITIONAL PRODUCT DATA

Fixed-point arithmetic time	0.32 microseconds typical
Floating-point arithmetic time	1.1 microseconds typical
Maximum total blocks	1024; subject to MMC capacity
MPI interfaces	1
Maximum MPI rate	187.5 kbit/s

03 PRODUCT FUNCTION

The CPU performs a typical bit operation in 0.1 microseconds and a floating-point operation in 1.1 microseconds. Its MPI interface supports rates up to 187.5 kbit/s, while the total block capacity is up to 1024 subject to the installed MMC. The supply accepts 19.2 to 28.8 V DC; rated current is 650 mA and typical power loss is 4 W.

04 SYSTEM COMPATIBILITY

Fit a compatible Micro Memory Card and confirm that the program fits the 32 kbyte integrated work memory as well as the available load memory. The MMC supports battery-free retention but is not an expansion of the fixed work memory. Record the MPI address and baud rate used by the programming and operator devices.

05 REFERENCE

Siemens 6ES7312-1AE14-0AB0 official product data; applicable specification pages.

AMIKON PRODUCT SUPPORT

+86-18020776786 INFO@AMIKON.CN **AMIKONG.COM**