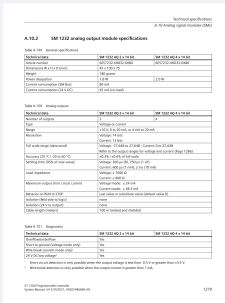


AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

Siemens 6ES7232-4HB32-0XB0

SM 1232 AQ 2 x 14 bit



ANALOG OUTPUTS	VOLTAGE RANGE	CURRENT RANGE	VOLTAGE RES.
2	+/-10 V	0/4-20 mA	14 bits

Siemens 6ES7232-4HB32-0XB0 is the SIMATIC S7-1200 SM 1232 AQ 2 x 14 bit analog output module. It provides two outputs configurable for voltage or current, with a voltage range of -10 to +10 V and current ranges of 0 to 20 mA or 4 to 20 mA. Voltage and current modes have different resolution and load requirements.

01 VERIFIED PRODUCT PARAMETERS

Analog output channels	2
Voltage output range	-10 to +10 V
Current output ranges	0 to 20 mA or 4 to 20 mA
Voltage resolution	14 bits
Current resolution	13 bits
Voltage load impedance	At least 1000 ohms
Current load impedance	Maximum 600 ohms
Accuracy at 25 degrees C	Plus or minus 0.3% of full scale
Accuracy from -20 to 60 degrees C	Plus or minus 0.6% of full scale
Voltage settling time to 95%	300 microseconds resistive; 750 microseconds at 1 microfarad

Technical values were verified against Siemens S7-1200 A5E02486680-AO; S200 PTI 11/2024 and the Siemens Industry Mall record for the exact article number.

02 ADDITIONAL TECHNICAL DATA

Current settling time to 95%	600 microseconds at 1 mH; 2 ms at 10 mH
RUN-to-STOP behavior	Last value or substitute value; default 0
Field-to-logic isolation	None
SM bus current consumption	80 mA
24 V current consumption	45 mA without load

03 SYSTEM ROLE AND APPLICATIONS

Match the selected range to the receiving device and define the required output behavior when the CPU changes from RUN to STOP. The module does not provide field-to-logic or supply-to-output isolation. Verify references, cable shielding and settling time under the actual connected load before commissioning.

- Provide an analog drive command: The Siemens S200 PTI speed-control connection example includes the SM 1232 AQ 2 x 14 bit. Match the drive analog-input assignment and command scaling, and validate the configured speed response with the machine in a controlled state.
- Connect a torque-mode drive interface: The S200 PTI torque-control example also identifies this two-channel output family. Configure the receiver and analog command for the selected drive mode; verify command direction, limits and the complete machine response before normal operation.
- Transmit a PID output to an actuator: Use a correctly scaled analog output for a compatible continuous actuator in an engineered S7-1200 PID loop. Match the receiver voltage or current range and define behavior on controller STOP; validate the complete feedback loop before automatic control.

04 OFFICIAL INSTALLATION FACTS

- Isolate power and place the controlled process in an approved maintenance state before wiring.
- Connect the supply and functional earth as shown in the exact two-channel diagram.
- Use the specified gold terminals and identify AQ0/AQ0M and AQ1/AQ1M correctly.
- Match voltage or current mode and load impedance to the receiving device.

05 OFFICIAL DOCUMENTATION

Siemens S7-1200 A5E02486680-AO; S200 PTI 11/2024

AMIKON PRODUCT SUPPORT

Amikon Limited | INFO@AMIKON.CN