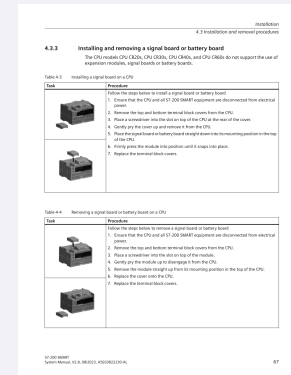


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Siemens 6ES7288-5AQ01-0AA0

SB AQ01 Analog Output Board



PRODUCT	6ES7288-5AQ01-0AA0
FAMILY	SIMATIC S7-200 SMART
FUNCTION	SB AQ01 Analog Output Board
STATUS	Verify exact configuration

Prepared by Amikon Limited from Siemens S7-200 SMART V2.8, A5E03822230-AL, 08/2023. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Voltage output range	-10 to +10 V
Current output range	0 to 20 mA
Output resolution	Voltage: 11 bits plus sign; current: 11 bits
Output accuracy	+/-0.5% at 25 degrees C; +/-1% at -20 to +60 degrees C
Voltage settling time	95%: 300 us resistive; 750 us at 1 uF
Current settling time	95%: 600 us at 1 mH; 2 ms at 10 mH
Voltage load impedance	At least 1000 Ohm

02 MOUNTING AND CONNECTION

- Disconnect the CPU and all connected SMART equipment from electrical power before fitting the board.
- Follow the official top-mounted signal-board procedure and verify the CPU supports this board.
- Wire X19 pin5 AQ0, pin6 AQ0M and pin4 functional earth; leave pins1 through3 unconnected.
- Use twisted shielded cable within 10 m and respect the different voltage/current load limits.
- Set the required output mode, word scaling and last-value or substitute-value behavior in STOP.

OFFICIAL INSTALLATION REFERENCE

Installation

4.3 Installation and removal procedures

4.3.3 Installing and removing a signal board or battery board

The CPU models CPU CR20s, CPU CR30s, CPU CR40s, and CPU CR60s do not support the use of expansion modules, signal boards or battery boards.

Table 4-3 Installing a signal board on a CPU

Task	Procedure
	Follow the steps below to install a signal board or battery board 1. Ensure that the CPU and all S7-200 SMART equipment are disconnected from electrical power. 2. Remove the top and bottom terminal block covers from the CPU. 3. Place a screwdriver into the slot on top of the CPU at the rear of the cover. 4. Gently pry the cover up and remove it from the CPU. 5. Place the signal board or battery board straight down into its mounting position in the top of the CPU. 6. Firmly press the module into position until it snaps into place. 7. Replace the terminal block covers.
	

Table 4-4 Removing a signal board or battery board on a CPU

Task	Procedure
	Follow the steps below to remove a signal board or battery board 1. Ensure that the CPU and all S7-200 SMART equipment are disconnected from electrical power. 2. Remove the top and bottom terminal block covers from the CPU. 3. Place a screwdriver into the slot on top of the module. 4. Gently pry the module up to disengage it from the CPU. 5. Remove the module straight up from its mounting position in the top of the CPU. 6. Replace the cover onto the CPU. 7. Replace the terminal block covers.
	

Official manufacturer reference reproduced from Siemens S7-200 SMART V2.8, A5E03822230-AL, 08/2023. Use the current source document and all referenced drawings and notes for installation.

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CABLE ROUTING AND CONNECTION

- Follow the official top-mounted signal-board procedure and verify the CPU supports this board.
- Wire X19 pin5 AQ0, pin6 AQ0M and pin4 functional earth; leave pins1 through3 unconnected.
- Use twisted shielded cable within 10 m and respect the different voltage/current load limits.
- Set the required output mode, word scaling and last-value or substitute-value behavior in STOP.
- Measure the commanded output and applicable diagnostics with the process safely controlled before release.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Measure output scaling, selected STOP behavior and the mode-specific diagnostics.
- Record the installed order number and baseline operating condition.

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CONTROLLED DOCUMENTS

Official source	Siemens S7-200 SMART V2.8, A5E03822230-AL, 08/2023
Product record	6ES7288-5AQ01-0AA0
Manufacturer	Siemens
Support	INFO@AMIKON.CN