

AMIKON TECHNICAL DOCUMENTATION

Installation Instructions

Siemens 6ES7521-1BH50-0AA0

SIMATIC S7-1500 / ET 200MP | DI 16x24VDC SRC BA

PLATFORM	CHANNELS	DIRECTION	SUPPLY
S7-1500 / ET 200MP	16 inputs	Reading M	24 V DC

For qualified personnel. Follow the Siemens system and module manuals and site safety procedures. Secure the machine before changing wiring; this quick guide does not replace the original instructions.

01

BEFORE WIRING

Confirm the full article	6ES7521-1BH50-0AA0; DI 16x24VDC SRC BA
Check sensor compatibility	Sourcing input reads M; match the complete sensor circuit
Select the front connector	Ordered separately; use the applicable Siemens connector
Check supply range	20.4 to 28.8 V DC
Observe mounting temperature	Horizontal: 0-60 C; vertical: 0-40 C

02

CIRCUIT & CONFIGURATION CHECKS

- Use the original terminal assignment on the next page and verify the polarity of every field circuit.
- Check two-wire sensor quiescent current: the Siemens maximum is 1.5 mA.
- Confirm the configured start address and channel mapping before testing signals.

03 OFFICIAL TERMINAL ASSIGNMENT

Wiring 3

This section contains the block diagram of the module and outlines various wiring options. You can find information on wiring the front connector, creating a cable shield, etc. in the Wiring section of the S7-1500/ET 200MP (<http://support.automation.siemens.com/WW/view/en/59191792>) system manual.

Wiring and block diagram

The figure below shows you how to connect the module and channel addressing (input byte a to input byte b)

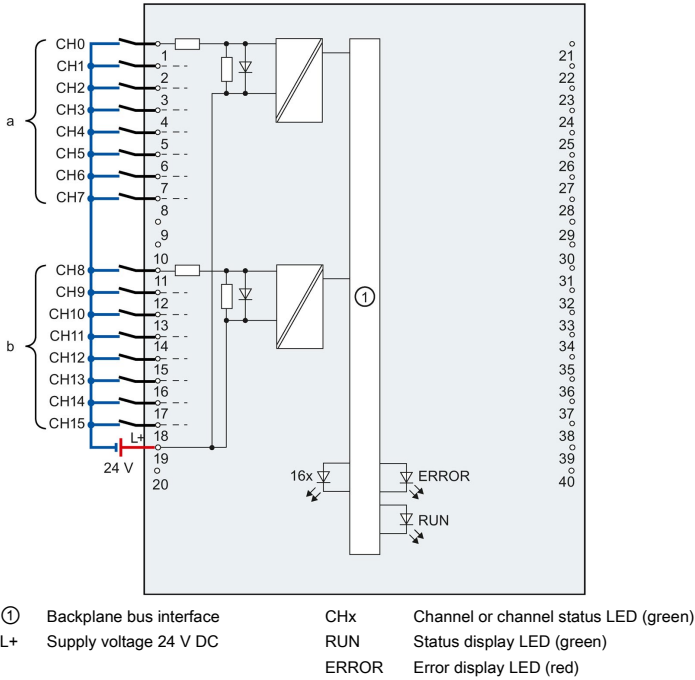


Figure 3-1 Block diagram and terminal assignment

04 POTENTIAL JUMPERS & COMMISSIONING

01	For the documented jumper arrangement, connect 24 V DC to terminals 19 (L+) and 20 (M).
02	Fit potential jumpers 19-39 (L+) and 20-40 (M); terminals 39/40 may distribute supply to a neighboring module.
03	Do not exceed the Siemens limit of 8 A per potential jumper. Check the complete supply and protection design.
04	Check U connectors and the CPU or interface-module configuration. The basic 16-channel configuration uses two input bytes.
05	Operate each field switch and verify its channel LED and PLC input bit; test the intended application response.

05 STATUS & APPLICATION LIMITS

- RUN and ERROR both off: check backplane supply, U connectors and the permitted module count. RUN on with ERROR off indicates the module is ready.
- RUN and ERROR both flashing indicates defective hardware in the Siemens status table; follow the documented replacement procedure.
- This BA module does not provide wire-break or short-circuit monitoring, hardware interrupts or high-speed counting.

Original Siemens module manual - wiring pp. 13-14; LEDs pp. 19-20

Siemens S7-1500 / ET 200MP system manual

Shared Input and split-submodule use require suitable firmware and engineering/interface support. The 2016 manual lists the dependencies on p. 12 and the configurations on pp. 15-18.

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