MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Selected official pages for procurement and maintenance review

PRODUCT BRAND

Siemens

PRODUCT MODEL

6ES7288-5BA01-0AA0

SB BA01 Battery Backup Board. Relevant section pages: 2, 844, 845. Adjacent model text on shared pages is outside this product reference.

OFFICIAL SOURCE

S7-200 SMART System Manual; V2.5, 01/2020

Siemens original documentation and product reference

Historical V2.5 (01/2020) product reference, not installation instructions. V2.8 adds: battery operating temperature must meet module requirements. Adjacent DP01 rows are excluded.

AMIKON PRODUCT SUPPORT

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Amikon Limited prepared this independent reference package. Selected manufacturer pages follow with their original content and pagination visible.

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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A.9 Battery board signal boards (SBs)

A.9.1 SB BA01 Battery board

SB BA01 Battery board

The S7-200 SMART SB BA01 battery board provides for long-term backup of the real-time clock. The battery board plugs into the signal board slot of the S7-200 SMART CPU (firmware V2.0 and later versions). You must add the SB BA01 to the device configuration and download the hardware configuration to the CPU for the SB BA01 to gain access to the additional battery health reporting options.

When you purchase the SB BA01 battery board, it does not include the battery (type CR1025). You must purchase the battery separately.

Note

The SB BA01 is mechanically designed to fit the CPUs with the firmware V2.0 and later versions.

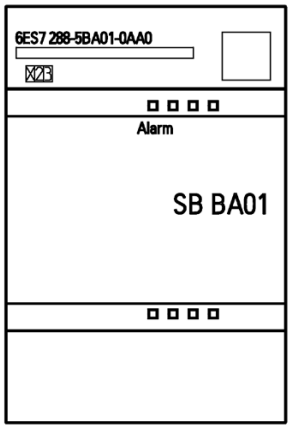
Table A- 157 General specifications

Technical data	SB BA01 Battery Board
Article number	6ES7288-5BA01-0AA0
Dimensions W x H x D (mm)	35 x 52.2 x 16
Weight	20 grams
Power dissipation	0.6 W
Current consumption (5 V DC)	18 mA
Current consumption (24 V DC)	None

Battery (not included)	SB BA01 Battery Board
Hold up time	Approximately 1 year
Battery type	CR1025 Refer to Installing or replacing a battery in the SB BA01 battery board (Page 50)
Nominal voltage	3 V
Nominal capacity	30 mAH

Diagnostics	SB BA01 Battery Board
Critical battery level	< 2.5 V
Battery diagnostic	Low voltage indicator: • Low battery voltage causes the LED on the BA01 panel to illuminate with the red light continuously ON. • Diagnostic alarm and/or digital output status of battery low condition available
Battery status	Battery status bit provided 0 = Battery OK 1 = Battery low
Battery status update	Battery status is updated at power up and then once per day while CPU is in RUN mode.

Table A- 158 Wiring diagram for the SB BA01 Battery board (6ES7288-5BA01-0AA0)

SB BA01 Battery board (6ES7288-5BA01-0AA0)	
	

A.10 EM DP01 PROFIBUS DP module

Table A- 159 General specifications

Technical data		EM DP01 PROFIBUS DP
Article number		6ES7288-7DP01-0AA0
Dimensions W x H x D (mm)		70 x 100 x 81
Weight		176.2 g
Power dissipation		1.5 W (no load)
V DC requirements		
	+5 V DC (SM Bus)	150 mA (no load)
	+24 V DC	See below