

APTER POWER PRODUCT MANUAL

6ES7288-3AT04-0AA0

SIMATIC S7-200 SMART EM AT04 Thermocouple Input Module

The Siemens 6ES7288-3AT04-0AA0 is a SIMATIC S7-200 SMART EM AT04 Thermocouple Input Module that provides four thermocouple inputs with 0.1 degree temperature resolution.

In an S7-200 SMART automation station, it integrates four compatible thermocouple signals into signed 16-bit temperature values with cold-junction compensation. It works with the exact CPU, expansion-bus or signal-board interface, wiring, field devices, and project configuration specified for the complete article number. It is applied in ovens, furnaces, heated tooling, exhaust systems, and high-temperature process monitoring.

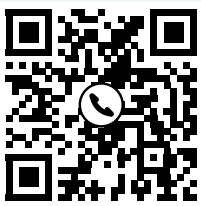
Manufacturer	Siemens
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

**Four thermocouples. Signed 16-bit data.
Dependable heat-process visibility.**

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SCAN FOR PRODUCT & QUOTE
6ES7288-3AT04-0AA0

1. Product Overview and Identity

The Siemens 6ES7288-3AT04-0AA0 is a SIMATIC S7-200 SMART EM AT04 Thermocouple Input Module that provides four thermocouple inputs with 0.1 degree temperature resolution.

In an S7-200 SMART automation station, it integrates four compatible thermocouple signals into signed 16-bit temperature values with cold-junction compensation. It works with the exact CPU, expansion-bus or signal-board interface, wiring, field devices, and project configuration specified for the complete article number. It is applied in ovens, furnaces, heated tooling, exhaust systems, and high-temperature process monitoring.

Model Configuration

Field	Verified information
Complete model	6ES7288-3AT04-0AA0
Manufacturer	Siemens
Product description	SIMATIC S7-200 SMART EM AT04 Thermocouple Input Module

Key Features

- Exact Siemens MLFB 6ES7288-3AT04-0AA0
- SIMATIC S7-200 SMART EM AT04 Thermocouple Input Module
- 4 thermocouple analog inputs
- 24 V DC; 20.4 to 28.8 V DC
- 45 x 100 x 81 mm
- 0.125 kg approximate device weight

2. Technical Specifications

Only manufacturer-confirmed information is stated. Values absent from the named Siemens source are marked for nameplate or document verification.

Parameter	Verified value
Product type	SIMATIC S7-200 SMART EM AT04 Thermocouple Input Module
Complete article number	6ES7288-3AT04-0AA0
System	SIMATIC S7-200 SMART
Primary function	four thermocouple inputs with 0.1 degree temperature resolution
Signal configuration	4 thermocouple analog inputs
Supply / host interface	24 V DC; 20.4 to 28.8 V DC
Product type designation	EM AT04, AI TC 4x16 bit
Thermocouple inputs	4
Temperature resolution	0.1 deg C / 0.1 deg F
Voltage resolution	15 bits plus sign
Cold-junction error	+/-1.5 deg C
Maximum sensor cable length	100 m
Power loss	1.5 W
Degree of protection	IP20
Device dimensions	45 x 100 x 81 mm (W x H x D)
Approximate device weight	0.125 kg
Country of origin	Germany
Lifecycle	The exact article number is documented in current Siemens technical data and product records; confirm regional ordering availability at quotation.

Verification Note

Use the complete 6ES7288-3AT04-0AA0 identifier. The exact article number is documented in current Siemens technical data and product records; confirm regional ordering availability at quotation. Values not published in the cited Siemens sources are intentionally not inferred.

3. Functions, Applications and Components

Core Functions

- Integrates four compatible thermocouple signals into signed 16-bit temperature values with cold-junction compensation.
- Maintains the documented EM AT04 function for the complete 6ES7288-3AT04-0AA0 article number.
- Provides a model-specific basis for wiring, configuration, commissioning, diagnostics, and replacement verification.

Application Areas

Application	System role
Thermocouple acquisition	Converts four compatible thermocouple signals into temperature values
High-temperature monitoring	Supplies data for alarms, permissives, and process supervision
Cold-junction compensated measurement	Uses the module's documented compensation and configured thermocouple type
Heat-process equipment	Supports ovens, furnaces, heated tooling, exhaust systems, and high-temperature process monitoring

Compatible Components

- S7-200 SMART or ET 200 SMART configuration that explicitly supports 6ES7288-3AT04-0AA0
- Expansion-bus connection, removable terminal blocks, DIN rail, and panel clearances specified by Siemens
- Shielded analog sensor or actuator cabling with documented grounding and reference conductors
- Field transmitters, sensors, loads, and power supplies matched to every published signal range and channel limit

Lifecycle Status

The exact article number is documented in current Siemens technical data and product records; confirm regional ordering availability at quotation.

4. Installation Precautions

- Identity: Match every character of 6ES7288-3AT04-0AA0 and the EM AT04 marking to the physical nameplate and project
- Host and power: Verify 24 V DC; 20.4 to 28.8 V DC; isolate all energy sources before insertion, removal, or wiring
- Sensors: Match thermocouple type, polarity, extension cable, cold-junction compensation, filter, and engineering units to Siemens instructions
- Cabling: Follow Siemens terminal, shielding, grounding, separation, and maximum cable-length instructions
- Commissioning: Verify addresses and scaling, energize one circuit group at a time, test fail-safe behavior, and record results

STOP - Verify before installation

Use the complete 6ES7288-3AT04-0AA0 identifier. The exact article number is documented in current Siemens technical data and product records; confirm regional ordering availability at quotation. Values not published in the cited Siemens sources are intentionally not inferred.

Use the physical nameplate and current Siemens documents as the controlling records.

5. Official Source and Use Notice

Official source

Siemens official technical data sheet or product record for 6ES7288-3AT04-0AA0: <https://support.industry.siemens.com/teddatasheet/?caller=SIOS&format=pdf&language=en&mlfbs=6ES7288-3AT04-0AA0>; Siemens official system manual used for model-specific installation and compatibility context: https://support.industry.siemens.com/cs/attachm/109963390/SIMATIC_ET_200_SMART_IM60_System_Manual_en-US.pdf

Apter Power product page

<https://www.apterpower.com/Siemens/6es7288-3at04-0aa0>

Use Notice

This is an original Apter Power product-specific reference prepared from the Siemens source named above. It is not a Siemens publication and does not replace the original data sheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com or contact sales13@apterpower.com.