01 / Product and system dashboard

SIEMENS

6ES5470-4UC12

Analog Output Module

Product role

Siemens 6ES5470-4UC12 is an eight-channel SIMATIC S5 analog output module with 1–5 V and 4–20 mA outputs.

SIMATIC S5
Digital command values

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470-4UC12
Analog conversion

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Process interface
1–5 V / 4–20 mA

Engineering scope

The 470-4UC12 output ranges apply to this order code; shared 470 module specifications retain their stated load and operating conditions.

02 / Verified identity and technical relationships

Property	Applicable fact	Property	Applicable fact
System family	SIMATIC S5	Nominal command scale	0–1024 units for 4UC variant
Module function	Analog output	Output delay	≤1 ms after data transfer
Output channels	8	Voltage-mode load	≥3.3 kΩ; maximum output current 3 mA
Voltage output range	1–5 V	Current-mode load	≤300 Ω
Current output range	4–20 mA, parallel with voltage output	Operating error	±0.6% over 0–60 °C
Value representation	12-bit two's complement	Capacitive load	<100 nF including line capacitance

Configuration boundary

The 470-4UC12 output ranges apply to this order code; shared 470 module specifications retain their stated load and operating conditions.

03 / Applications and system integration

Process setpoints

Use the 1–5 V outputs for compatible process interfaces while preserving the controller scale and reference potential.

Current-loop commands

Use the 4–20 mA connections with loads within 300 Ω and verify the receiving device range.

S5 maintenance

Retain the complete 4UC12 order code, rack arrangement and existing program addressing during replacement.

Loop verification

Check command-to-output response at controlled test points before releasing the connected process.

Functional context

The output-value representation is 12-bit two's complement. The common 470 specification gives a delay of no more than 1 ms from data transfer to the analog output, and an operating error limit of ±0.6% over 0–60 °C. The eight outputs share the external reference Mext; isolation does not mean separate isolation between individual channels.

04 / Service and installation decisions

Isolate the process

Place the machine in a safe state and isolate power before handling the module or front connector.

Preserve the variant

Use the complete 6ES5470-4UC12 reference; other 470 suffixes have different output ranges.

Check the load

Keep voltage loads at or above 3.3 kΩ and current loads at or below 300 Ω.

Respect the common reference

Check Mext and the front-connector wiring. The eight outputs are not individually isolated channels.

Retain configuration

Record the address and output scaling before removal; verify them against the installed S5 application.

Test under control

Apply controlled output commands and confirm the receiving equipment response before restoring normal operation.

05 / Reference basis and related portfolio

Lifecycle and supply

A current manufacturer lifecycle phase has not been confirmed. Request current support and replacement guidance using the complete 6ES5470-4UC12 identity. Apter Power availability is confirmed separately in the quotation.

Reference basis

Siemens SIMATIC S5 analog input/output module instructions, C79000-B8576-C300-06.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

Siemens 6ES5434-4UA11

Siemens 6ES5420-4UA12

Siemens 6ES5312-5CA11

Discuss your installed configuration

Send the full unit marking and connection details.

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