

MODEL-SPECIFIC TECHNICAL REFERENCE

Siemens 6ES5451-4UA12 SIMATIC S5 Digital Output Module

6ES5451-4UA12 is a Siemens SIMATIC S5 32-channel digital output module for 24 V DC, 0.5 A loads. The module provides short-circuit protection and alarm behavior for legacy S5-115U control cabinets.

Manufacturer Siemens	Product family SIMATIC S5-115U	Configuration 6ES5451-4UA12
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Officially documented configuration

Order number	6ES5451-4UA12
Product family	SIMATIC S5
Module function	Digital output
Output count	32
Rated load voltage	24 V DC
Maximum output current	0.5 A per channel
Minimum output current	5 mA
Off-state residual current	Less than 0.5 mA
Off-state residual voltage	Less than 3 V
On-state output voltage	Greater than supply minus 1.5 V
Output protection	Short-circuit protected
Diagnostic behavior	Short-circuit alarm
Permissible cable length	Less than 400 m
Rack width	1 slot
Output paralleling	Not permitted
Measured warehouse weight	0.46 kg
Measured warehouse dimensions	2 x 19.5 x 25.5 cm

INSTALLATION AND PROCUREMENT REFERENCE

6ES5451-4UA12 application guidance

Siemens 6ES5451-4UA12 is the 32-point digital output module documented for SIMATIC S5 equipment. Each transistor output is intended for 24 V DC service with up to 0.5 A load current under the specified group and module limits.

The module switches actuators such as solenoids, relays, indicator circuits, and other discrete DC loads from the S5 process image. Short-circuit protection and the associated alarm behavior help the controller identify output-side faults.

Do not parallel output channels, and do not treat the module as equivalent to another 451 suffix without checking the rack, addressing, connector, load grouping, diagnostic response, and program. Verify field-energy isolation and inductive-load suppression before transferring conductors.

High-risk technical note

For 6ES5451-4UA12, never parallel outputs; verify group current, inductive suppression, connector wiring, rack addressing, and short-circuit cause before energizing.

Manufacturer source record

- Siemens SIMATIC S5 Programmable Controller Manual PGC302
- Siemens 805SM-TW Interface Part 2 Connection Conditions



Request a quotation for 6ES5451-4UA12

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Please include the complete nameplate, quantity, destination, and required delivery date.

Prepared from the manufacturer references listed above. Verify the latest manufacturer revision and the complete installed configuration before replacement or commissioning.