

6ES5451-4UA12

Digital Output Module

PRODUCT AND SYSTEM TECHNICAL REFERENCE

It provides thirty-two floating 24 VDC outputs rated at 0.5 A for an installed SIMATIC S5 compact U-periphery station.

- Provides thirty-two digital outputs
- Supports 0.5 A per output
- Uses floating 24 VDC output circuits
- Fits the documented compact U-periphery position

VERIFIED IDENTITY

Article number	6ES5451-4UA12
Module designation	SIMATIC S5 451 digital output module
Output count	32
Output supply	24 V DC
Rated output current	0.5 A per output
Electrical arrangement	Floating outputs

Official source: Siemens SIMATIC S5 U Periphery Instructions and exact Industry Mall article record
Publication: C79000-B8576-C300-06; exact MLFB product record

APPLICATION SNAPSHOT

Thirty-two-point actuator command	Commands a dense bank of discrete field loads.
Solenoid and relay output control	Switches documented 24 VDC solenoids or interposing relays.
SIMATIC S5 machine sequencing	Executes machine-output logic from the installed S5 controller.
S5 output-module replacement	Restores the exact floating-output position without changing addresses.

TECHNICAL SPECIFICATIONS

Article number	6ES5451-4UA12
Module designation	SIMATIC S5 451 digital output module
Output count	32
Output supply	24 V DC
Rated output current	0.5 A per output
Electrical arrangement	Floating outputs
Mechanical version	Compact version U
Lifecycle	Discontinued; deleted without replacement
Lifecycle effective date	1 October 2002
Export classification	ECCN N; AL N
Packaging quantity	1 piece
Siemens catalog identifier	ST9-E5

MATCHED COMPONENTS

- SIMATIC S5 U-periphery rack
- documented 24 VDC load supply and output commons
- approved front connector and field wiring
- S5 controller project and output address map

TECHNICAL ACCEPTANCE CRITERIA

Exact identity	Complete 6ES5451-4UA12 marking matches the controlled record
System match	Installed position belongs to the SIMATIC S5 compact U-periphery system
Companion hardware	All required rack, connector, field and project items are reconciled
Electrical limits	Supply, ranges and signal values remain within the named Siemens data
Diagnostics	Module, rack, network and host indications are understood and accepted
Controlled response	The thirty-two 24 vdc output circuits function is proven and recorded

Confirm all thirty-two addresses, group supply conductors, load polarity and protective devices; this discontinued article has no Siemens replacement.

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SYSTEM INTEGRATION & FAQ

DOCUMENTED APPLICATIONS

Thirty-two-point actuator command	Commands a dense bank of discrete field loads.
Solenoid and relay output control	Switches documented 24 VDC solenoids or interposing relays.
SIMATIC S5 machine sequencing	Executes machine-output logic from the installed S5 controller.
S5 output-module replacement	Restores the exact floating-output position without changing addresses.

PRODUCT PRECAUTIONS

- Verify the complete 6ES5451-4UA12 marking and the assigned SIMATIC S5 compact U-periphery system position before work.
- Isolate all applicable power and thirty-two 24 vdc output circuits field energy before disconnection.
- Use ESD controls and protect keyed interfaces, exposed contacts and electronic assemblies.
- Restore power in a controlled sequence and review module, rack and host diagnostics.
- Place the connected thirty-two-point actuator command process in the approved maintenance state.
- Record every connector, conductor, address, jumper and project identity before removal.
- Confirm the installed SIMATIC S5 U-periphery rack and documented 24 VDC load supply and output commons against the approved system record.
- Prove the intended solenoid and relay output control function and retain the final acceptance result.

ENGINEER FAQ — PART 1

1	What output function identifies Siemens 6ES5451-4UA12?	It is the SIMATIC S5 451 compact-U digital output module with thirty-two floating outputs.
2	Which load supply and channel rating apply to 6ES5451-4UA12?	Use the documented 24 VDC load supply and keep each output within the published 0.5 A rating.
3	Why must all thirty-two addresses be recorded before removing 6ES5451-4UA12?	The module represents a complete 32-point bank; preserving the slot and point map prevents output-address shifts.
4	How should floating circuits be handled on 6ES5451-4UA12?	Retain the documented group supplies, commons and isolation boundaries instead of joining circuits during rewiring.

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ENGINEER FAQ & RELATED PRODUCTS

1	Which mechanical position is intended for 6ES5451-4UA12?	Install it only in the approved SIMATIC S5 compact U-periphery position with the recorded front connector.
2	What does the lifecycle record mean for 6ES5451-4UA12 service?	Siemens lists the article as discontinued and deleted without replacement, so like-for-like identity and project preservation are essential.
3	Can 6ES5451-4UA12 be replaced by a similar 451 suffix automatically?	No. Compare the full MLFB, output count, floating arrangement, voltage, current and connector assignment before any substitution.
4	What commissioning test is required for 6ES5451-4UA12?	Energize the load groups under control and exercise every addressed output while confirming the correct field load and controller indication.

RELATED PRODUCTS ON APTER POWER

01	GE IC752SPL013	Related industrial automation product
02	Emerson KJ2005X1 SQ1 12P6383X022	Related industrial automation product
03	Bently Nevada 3500 05 01 01 01 00 01	Related industrial automation product
04	Bently Nevada 330180 X1 00 MOD 145004 09	Related industrial automation product
05	Siemens A5E00296878	Related industrial automation product
06	Siemens A5E34612879	Related industrial automation product
07	Siemens A5E00825002	Related industrial automation product
08	Siemens A5E00755411	Related industrial automation product

Manufacturer source	Siemens SIMATIC S5 U Periphery Instructions and exact Industry Mall article record
Publication	C79000-B8576-C300-06; exact MLFB product record
Technical boundary	Values are limited to this exact-model source record
Acceptance evidence	Retain the as-left identity, diagnostics and controlled test result

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