Siemens 6ES5947-3UR21

Complete Product Information

Siemens 6ES5947-3UR21 is a CPU 947R F central processing unit for the SIMATIC S5-155H programmable controller. It executes the STEP 5 control program and coordinates the controller's rack-based automation tasks.

PRODUCT ROLE AND VERIFIED FEATURES

Feature 1

Identified by Siemens as a SIMATIC S5 CPU 947R F central processing unit.

Feature 2

Assigned to the S5-155H programmable-controller platform.

Feature 3

Executes the stored STEP 5 user program and controller operating functions.

Feature 4

Supports the redundant processor role defined for the S5-155H architecture.

VERIFIED DATA SNAPSHOT

Product family	SIMATIC S5
Processor type	CPU 947R F
Controller system	S5-155H
Programming environment	STEP 5

SYSTEM RELATIONSHIP

Field device → **Product interface** → **System channel** → **Verified response**

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Product dossier

Siemens 6ES5947-3UR21 is a CPU 947R F central processing unit for the SIMATIC S5-155H programmable controller. It executes the STEP 5 control program and coordinates the controller's rack-based automation tasks.

VERIFIED IDENTITY AND ROLE

Product family	SIMATIC S5
Processor type	CPU 947R F
Controller system	S5-155H
Programming environment	STEP 5
Module role	Central processing unit
Lifecycle	Discontinued product
System architecture	Redundant S5-155H processor

PRODUCT CHARACTERISTICS

- Identified by Siemens as a SIMATIC S5 CPU 947R F central processing unit.
- Assigned to the S5-155H programmable-controller platform.
- Executes the stored STEP 5 user program and controller operating functions.
- Supports the redundant processor role defined for the S5-155H architecture.

SELECTION BOUNDARY

Article identity	Use the complete 6ES5947-3UR21 ordering string.
Processor designation	Confirm the CPU 947R F marking.
Controller platform	Apply only to the documented S5-155H system.
Engineering environment	Retain the approved STEP 5 project and operating record.

IMPORTANT NOTICE	Use the complete article number and verify the intended SIMATIC system before installation.

System context and applications

Field device → Product interface → System channel → Verified response

DOCUMENTED SYSTEM RELATIONSHIP

The redundant cpu module serves a defined role in its documented SIMATIC system. Match the rack, interfaces, configuration and program safeguards before the controlled system returns to service.

COMMON APPLICATIONS

Legacy machine control

Run the existing STEP 5 control program in a maintained S5-155H rack.

Process sequencing

Coordinate deterministic logic, interlocks and output decisions in the installed controller.

Plant maintenance

Restore the documented processor position without changing the approved application program.

System recovery

Return the controller to its recorded startup state after an exact-article replacement.

CONFIGURATION RECORDS TO PRESERVE

Rack position	Record the installed slot and adjacent module arrangement.
Program assets	Preserve the STEP 5 user program and hardware configuration.
Memory resources	Identify installed memory media before transfer or replacement.
Interfaces	Label every connected interface before removal.
Operating state	Record CPU mode, indicators and the approved startup condition.

SERVICE INFORMATION PATH

Engineering record	Controlled configuration and project data define the intended system behavior.
Installed record	Module position, interfaces and field labels connect the article to its physical role.
Acceptance record	Diagnostics, communication and functional response provide the release evidence.

Operation, service and recovery

CONTROLLED SERVICE SEQUENCE

1 — Identify	Compare the complete article number and CPU 947R F designation with the work order.
2 — Safeguard	Back up the STEP 5 project, hardware setup and operating values.
3 — Record	Document slot, switches, memory resources and interface connections.
4 — Isolate	Remove power and apply the site's electrostatic-discharge controls.
5 — Install	Seat the verified CPU and restore recorded interfaces and configuration.
6 — Validate	Check both processor paths, synchronization and controlled switchover.

PRODUCT PRECAUTIONS

01	Confirm the complete 6ES5947-3UR21 article number and CPU 947R F designation before removing the installed CPU.
02	Verify that the host controller is the documented S5-155H platform.
03	Back up the STEP 5 user program, hardware configuration and operating parameters.
04	Record rack slot, switch positions, memory media and interface connections.
05	Remove power and follow site electrostatic-discharge controls before handling the module.
06	Do not transfer memory media until the required CPU state and site procedure are confirmed.
07	Check startup indicators, controller mode and I/O communication after installation.
08	Validate interlocks and the controlled machine sequence before returning outputs to service.

RECOVERY DECISION POINTS

CPU does not reach the recorded mode	Recheck module seating, memory resources and the approved startup procedure.
I/O communication is incomplete	Review rack interfaces, connected resources and the retained hardware configuration.
Controlled sequence differs	Stop release and compare the restored STEP 5 project with the verified backup.

Acceptance record and support

RELEASE EVIDENCE

Identity	6ES5947-3UR21 and its documented product designation verified.
System	Installed position and intended controller or station role confirmed.
Configuration	Controlled project, settings and interface assignments restored.
Communication	Applicable rack, bus, I/O or supply status checked after startup.
Functional response	The intended system response accepted before final release.
Service record	Technician, date, observed status and final disposition recorded.

MODEL-SPECIFIC QUESTIONS

What processor type is Siemens 6ES5947-3UR21?	It is the Siemens SIMATIC S5 CPU 947R F central processing unit.
Which controller platform uses Siemens 6ES5947-3UR21?	Siemens assigns it to the S5-155H programmable-controller system.
Which programming environment applies to Siemens 6ES5947-3UR21?	The controller application uses the SIMATIC STEP 5 environment.

RELATED SIEMENS MODELS

Siemens 6ES5931-8MD11	Related product reference. Review the complete ordering string before selection.
Siemens 6ES5482-4UA20	Related product reference. Compare the required interface and system position.
Siemens 6ES5430-4UA12	Related product reference. Confirm the execution independently for the intended task.

SOURCE AND CONTACT

Manufacturer source	Siemens Industry Mall product record for 6ES5947-3UR21
Evidence boundary	Technical statements are limited to the identified product or applicable manufacturer family.
Selection control	Use the complete ordering string and verify the installed system before purchase or installation.

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