

# 6ES5460-4UA12

## Analog Input Module

### INSTALLATION AND COMMISSIONING GUIDE

It provides eight floating SIMATIC S5 analog inputs and requires the matching Siemens measuring-range module for the selected signal type.

- Provides eight floating analog inputs
- Requires a measuring-range module
- Supports low-level voltage and Pt100 ranges
- Fits the compact U-periphery analog position

### VERIFIED IDENTITY

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| Article number           | 6ES5460-4UA12                                                        |
| Module designation       | SIMATIC S5 460 analog input module                                   |
| Analog inputs            | 8                                                                    |
| Electrical arrangement   | Floating; eight inputs referred to 0 V and isolated from one another |
| Measuring-range hardware | Range module required                                                |
| Range submodule          | 6ES5498-1AA11                                                        |

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

|                                    |                                                                       |
|------------------------------------|-----------------------------------------------------------------------|
| Isolated sensor acquisition        | Collects eight independent analog process channels.                   |
| Eight-point temperature monitoring | Acquires documented Pt100 measurement points.                         |
| Low-level voltage measurement      | Measures approved millivolt signals with the selected range hardware. |
| S5 460 module replacement          | Restores the exact 460-4UA12 measurement position.                    |



# 01 PRE-INSTALLATION PLAN

|        |                                                                                                                                   |
|--------|-----------------------------------------------------------------------------------------------------------------------------------|
| Step 1 | Verify the complete 6ES5460-4UA12 marking and the assigned SIMATIC S5 compact U-periphery system position before work.            |
| Step 2 | Place the connected isolated sensor acquisition process in the approved maintenance state.                                        |
| Step 3 | Isolate all applicable power and eight range-selected floating analog inputs field energy before disconnection.                   |
| Step 4 | Record every connector, conductor, address, jumper and project identity before removal.                                           |
| Step 5 | Use ESD controls and protect keyed interfaces, exposed contacts and electronic assemblies.                                        |
| Step 6 | Confirm the installed SIMATIC S5 U-periphery rack and 6ES5498-1AA11 measuring-range submodule against the approved system record. |
| Step 7 | Restore power in a controlled sequence and review module, rack and host diagnostics.                                              |
| Step 8 | Prove the intended eight-point temperature monitoring function and retain the final acceptance result.                            |

## MATCHED HARDWARE

- SIMATIC S5 U-periphery rack
- 6ES5498-1AA11 measuring-range submodule
- documented sensor wiring and shield system
- approved S5 analog scaling and block configuration

## 02 WIRING & INTERFACE CHECKS

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Exact model           | 6ES5460-4UA12                                                      |
| Installed system      | SIMATIC S5 compact U-periphery system                              |
| Controlled signal     | eight range-selected floating analog inputs                        |
| Connector record      | Capture terminal, plug, jumper and cable identities before removal |
| Shield and reference  | Restore only the documented as-found termination arrangement       |
| Supply isolation      | Verify all module, field and stored-energy sources are safe        |
| Configuration record  | Save addresses, ranges, parameters, software and project revision  |
| Pre-energization gate | Complete continuity, polarity, supply and protective-device checks |



## 03 COMMISSIONING & RETURN TO SERVICE

|                      |                                                                      |
|----------------------|----------------------------------------------------------------------|
| 1 — Identity         | Reconfirm 6ES5460-4UA12 and the assigned system position             |
| 2 — Mechanical       | Verify seating, retaining hardware, airflow and connector protection |
| 3 — Electrical       | Verify supply, polarity, references, shields and field protection    |
| 4 — Configuration    | Restore only the approved addresses, parameters and project          |
| 5 — Controlled power | Energize with the connected process in the maintenance state         |
| 6 — Diagnostics      | Review module, rack, network and host diagnostic indications         |
| 7 — Function         | Exercise the documented isolated sensor acquisition function         |
| 8 — Acceptance       | Record the final response and release authorization                  |

### APPLICATION-SPECIFIC TESTS

|                                    |                                                                       |
|------------------------------------|-----------------------------------------------------------------------|
| Isolated sensor acquisition        | Collects eight independent analog process channels.                   |
| Eight-point temperature monitoring | Acquires documented Pt100 measurement points.                         |
| Low-level voltage measurement      | Measures approved millivolt signals with the selected range hardware. |
| S5 460 module replacement          | Restores the exact 460-4UA12 measurement position.                    |

### RETURN-TO-SERVICE RECORD

|                         |                                                                  |
|-------------------------|------------------------------------------------------------------|
| Identification accepted | Complete model and installed marking verified                    |
| Connections accepted    | All conductors, connectors, shields and jumpers reconciled       |
| Configuration accepted  | Addressing, parameters and project revision confirmed            |
| Diagnostics accepted    | No unexplained module, rack, network or host faults              |
| Function accepted       | Documented controlled response proved                            |
| Record retained         | As-left evidence and approval stored with the maintenance record |



# MODEL-SPECIFIC FAQ & RELATED PRODUCTS

|   |                                                                         |                                                                                                                                                 |
|---|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <b>Why does Siemens 6ES5460-4UA12 require measuring-range hardware?</b> | The module depends on the matching range submodule to condition the selected sensor or voltage range before conversion.                         |
| 2 | <b>What channel count and isolation apply to 6ES5460-4UA12?</b>         | It has eight floating inputs referred to 0 V and isolated from one another.                                                                     |
| 3 | <b>Which Siemens range submodule is listed for 6ES5460-4UA12?</b>       | The U-periphery instructions list 6ES5498-1AA11 for the documented 50 mV, 500 mV and Pt100 selections.                                          |
| 4 | <b>What must be photographed before removing 6ES5460-4UA12?</b>         | Capture the complete MLFB, range submodule, bridge or switch positions, terminal wiring, shields and channel labels.                            |
| 5 | <b>How should an engineer preserve 6ES5460-4UA12 channel isolation?</b> | Maintain the documented reference conductors and shield topology; do not bond floating inputs together during rewiring.                         |
| 6 | <b>Which project data must match 6ES5460-4UA12?</b>                     | Restore the exact peripheral address, raw-value interpretation, fault handling and engineering-unit scaling for all eight channels.             |
| 7 | <b>What does the Siemens lifecycle entry say about 6ES5460-4UA12?</b>   | The article reached end of product lifecycle in October 2005 and was deleted without replacement.                                               |
| 8 | <b>How should 6ES5460-4UA12 be function-tested?</b>                     | Inject approved reference values for each installed range and verify every channel, scaling result and diagnostic state before process release. |

## RELATED PRODUCTS ON APTER POWER

|    |                                            |                                       |
|----|--------------------------------------------|---------------------------------------|
| 01 | <a href="#">GE IC670MDL330</a>             | Related industrial automation product |
| 02 | <a href="#">GE IC670MDL331</a>             | Related industrial automation product |
| 03 | <a href="#">GE IC670MDL241</a>             | Related industrial automation product |
| 04 | <a href="#">GE IC670MDL240</a>             | Related industrial automation product |
| 05 | <a href="#">Allen-Bradley 22B D4P0N104</a> | Related industrial automation product |
| 06 | <a href="#">GE IC670MDL233</a>             | Related industrial automation product |
| 07 | <a href="#">GE IC670ALG621</a>             | Related industrial automation product |
| 08 | <a href="#">GE IC670ALG630</a>             | Related industrial automation product |

### APTER POWER | INSTALLATION AND COMMISSIONING GUIDE

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