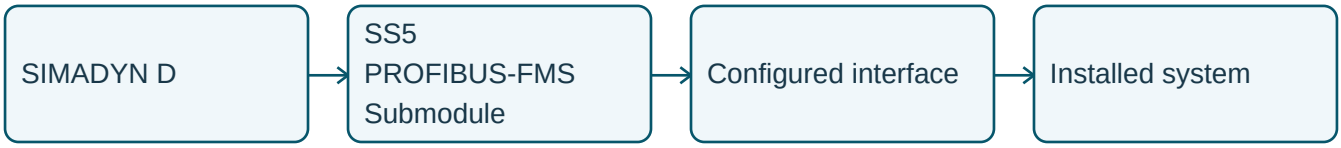
6DD1688-0AE0

01 / System identity and preparation

Siemens 6DD1688-0AE0 is the SS5 communications submodule for a SIMADYN D CS7 support module. It provides a master interface for PROFIBUS-FMS, also known as SINEC L2-FMS. FMS uses service-oriented client/server communication. SS5 is distinct from the SS52 PROFIBUS-DP/MPI execution, so the bus protocol must be matched to the fitted submodule.



Preparation priorities

Protocol selection	Match the SS5 FMS execution; do not substitute SS52 DP/MPI behavior.
CS7 integration	Match the CS7 support, selected receptacle and HWConfig configuration.

Guide boundary

This Apter Power guide organizes preparation and acceptance checks. Apply the manufacturer instructions and approved site procedure for detailed wiring, mounting, configuration and functional testing.

Application boundary

SS5-specific FMS data applies to 6DD1688-0AE0. The 16 kbyte dual-port memory belongs to CS7; SS52 DP/MPI and RS232 functions are separate.

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

02 / Configuration review before service

Protocol selection	Match the SS5 FMS execution; do not substitute SS52 DP/MPI behavior.
CS7 integration	Match the CS7 support, selected receptacle and HWConfig configuration.
Database and bus wiring	Retain the COMSS5 database and verify bus termination, screen bonding and the X5 connection.
Communication acceptance	Check initialization and CS7 diagnostic indications, then validate the expected client/server data exchange.

Protocol selection

Match the SS5 FMS execution; do not substitute SS52 DP/MPI behavior.

CS7 integration

Match the CS7 support, selected receptacle and HWConfig configuration.

Configured system behavior

The CS7 support module, communications submodule and selected receptacle are configured in HWConfig. Up to three communications submodules can be fitted to one CS7, while CPU data exchange uses the 16 kbyte dual-port RAM located on the support module. Connector X5 provides the electrically isolated RS485 PROFIBUS interface and an isolated 5 V supply for an Optical Link Module.

Mismatch decision

Resolve a different catalog marking, interface, software requirement or installed configuration before proceeding. Physical similarity alone does not establish an approved replacement.

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03 / Hardware and interface checks

Database and bus wiring

Retain the COMSS5 database and verify bus termination, screen bonding and the X5 connection.

Communication acceptance

Check initialization and CS7 diagnostic indications, then validate the expected client/server data exchange.

Key hardware references

Support module	CS7
Bus protocol	PROFIBUS-FMS / SINEC L2-FMS
Bus role	Master interface
Electrical interface	Isolated RS485 at X5

Configuration and service context

SS5 operation requires a COM database generated with COMSS5 and loaded into the submodule. The legacy tool runs on a suitable S5-DOS programmer or PC arrangement. The bus connector or terminal supplies switchable terminating resistors; cable layout and drop capacitance must suit the baud rate. Ground the cable screen over a large contact area at cabinet entry and preserve front-panel bonding to CS7. CS7 diagnostic LEDs distinguish missing database, initialization and bus activity.

Preserve the connection record

Photograph and label the affected connections before disconnection. Retain the original routing, module positions and identification with the work order, and compare the restored installation against that record.

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04 / Commissioning and diagnostic decisions

Protect the hardware

Use the applicable isolation and electrostatic-discharge controls. Preserve connectors, identification and mechanical retention during handling.

Verify the restored function

Apply the approved site acceptance procedure and compare actual behavior with the recorded system configuration before returning equipment to service.

Acceptance checkpoints

Before energization	Match the CS7 support, selected receptacle and HWConfig configuration.
Configuration review	Retain the COMSS5 database and verify bus termination, screen bonding and the X5 connection.
Functional release	Check initialization and CS7 diagnostic indications, then validate the expected client/server data exchange.

How is bus readiness assessed for 6DD1688-0AE0?

Use the associated CS7 LEDs to check initialization and database state, then verify actual bus activity and the configured data exchange.

Abnormal result

If diagnostics, communication or functional response differ from the approved baseline, stop the release and resolve the configuration or installation issue. Do not bypass an interlock or protective function to obtain a passing test.

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05 / Service record and technical references

Lifecycle and support

The manufacturer lifecycle phase is End of Product Lifecycle. Plan service and any replacement around the complete installed configuration.

Technical basis

Siemens Hardware - SIMADYN D, Communications Support Modules, Edition 12/2004; 6DD1688-0AE0 product information.

Applicability

SS5-specific FMS data applies to 6DD1688-0AE0. The 16 kbyte dual-port memory belongs to CS7; SS52 DP/MPI and RS232 functions are separate.

Related portfolio references

Siemens 6DD1640-0AD0

Siemens 6DD1660-0BJ0

Siemens 6DD1661-0AE0

Navigation only. These listings are not confirmed replacements, compatible accessories or included items.

Handover record

Retain the complete fitted marking, hardware/software revision where applicable, connection record and accepted test results. Confirm separate accessories and documents in the quotation.

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