01 / Product and system dashboard

SIEMENS

6DD1688-0AD0

Communication Module

Product role

Siemens 6DD1688-0AD0 is an SS4 serial communication module for the SIMADYN D CS7 support module, supporting DUST and USS applications.

CPU module
Configured data exchange

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CS7 and SS4
Protocol and physical interface

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External device
DUST or USS connection

Engineering scope

SS4 functions depend on the selected protocol software and physical-interface module; CS7 is the required support module.

02 / Verified identity and technical relationships

Property	Applicable fact	Property	Applicable fact
Module designation	SS4	Optional interface modules	SS1: 20 mA; SS2: RS-232; SS31: RS-485
Required carrier	CS7	USS role	Master
Carrier capacity	Up to 3 communication modules	Maximum baud rate	187.5 kbaud; protocol/interface dependent
CPU data exchange	16 KB dual-port RAM on CS7	Optional-module socket	X51, 40-pin dual-inline
Protocols	DUST1, DUST2, DUST3, USS	Connector parts set	SM8, 26-pin high-density connector
Standard interface	RS-232		

Configuration boundary

SS4 functions depend on the selected protocol software and physical-interface module; CS7 is the required support module.

03 / Applications and system integration

PC commissioning

Use DUST1 for the configured service and operator-PC connection with the appropriate physical interface.

Message printing

Use DUST2 for a message-printer connection and match the printer signaling requirements.

SIMATIC S5 exchange

Use DUST3 for the applicable AS 512 or CP 525 communication arrangement.

USS device coupling

Operate SS4 as USS master for supported panels, displays or converters with suitable RS-485 hardware and termination.

Functional context

Supported protocol applications include DUST1 for configuring and operator PCs, DUST2 for a message printer and DUST3 for SIMATIC S5 AS 512 or CP 525 connections. With USS, SS4 acts as master for devices such as OP2 panels, VD1 displays and compatible converters. The maximum rate is 187.5 kbaud, subject to the protocol software and physical-interface hardware.

04 / Service and installation decisions

Isolate the system

Place the connected process in a safe state and isolate the control supply before handling SS4 or its interface module.

Match the protocol

Verify DUST or USS configuration and the corresponding equipment; physical fit alone does not establish communication compatibility.

Check the carrier

Retain CS7 slot allocation and HWConfig settings when replacing the module.

Orient the interface

At X51, align the recess and pin-one marking of the optional interface with the socket.

Bond and terminate

Connect front-panel grounding, secure the connector and maintain shield bonding. Apply the specified termination at the ends of an RS-485 bus.

Verify diagnostics

Check the associated CS7 LEDs and a controlled data exchange before releasing the process.

05 / Reference basis and related portfolio

Lifecycle and supply

A current manufacturer lifecycle phase has not been confirmed. Request current support and replacement guidance using the complete 6DD1688-0AD0 identity. Apter Power availability is confirmed separately in the quotation.

Reference basis

Siemens SIMADYN D Hardware, Edition 12.2004, SS4 communications-module instructions.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

Siemens 6DD1642-0BC0

Siemens 6DD1607-0CA1

Siemens 6DD1682-0CC0

Discuss your installed configuration

Send the full unit marking and connection details.

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