6ES7331-7NF10-0AB0

01 / Product overview

SM 331 Analog Input Module

Siemens 6ES7331-7NF10-0AB0 is an isolated SM 331 analog input module for SIMATIC S7-300. It brings eight analog measurement channels into the controller so configured field values can be processed by the PLC program. The selected measurement range, wiring and channel parameterization must agree with the installed sensors.

Product identity

Product type	SM 331 Analog Input Module
Product series	SIMATIC S7-300
Input channels	8 analog inputs

Technical specifications

Product type	SM 331 isolated analog input module
Input channels	8 analog inputs
Voltage ranges	±5 V, ±10 V, 1-5 V
Current ranges	±20 mA, 0/4-20 mA
Conversion resolution	16 bit
Front connector	40-pole
Load supply	24 V DC

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

02 / Applications and service decisions

Process measurement

Acquire configured current or voltage transmitter signals in an S7-300 control cabinet.

Machine monitoring

Feed analog condition or position measurements to PLC logic and alarms.

Match the complete unit

Check the full 6ES7331-7NF10-0AB0 marking and any hardware revision against the installation record.

Isolate the installation

Follow the approved SIMATIC S7-300 isolation and stored-energy procedure before handling the unit.

Preserve the connection record

Label and photograph the sm 331 analog input module connections, terminations and mounting before removal.

Utility control

Monitor supported process variables in pumps, treatment or plant auxiliary systems.

S7-300 I/O replacement

Restore an existing SM 331 channel map when the installed range, connector and program agree.

Restore the configuration

Retain the approved SIMATIC S7-300 address, range, software or calibration settings that apply to the installed unit.

Protect the hardware

Use suitable electrostatic-discharge and mechanical protection while handling connectors, boards and retaining parts.

Verify the affected functions

After fitting 6ES7331-7NF10-0AB0, check diagnostics and the relevant I/O or process response under the site acceptance plan.

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03 / Selection and technical reference

What is the product type of Siemens 6ES7331-7NF10-0AB0?

SM 331 isolated analog input module.

What is the input channels of Siemens 6ES7331-7NF10-0AB0?

8 analog inputs.

What is the voltage ranges of Siemens 6ES7331-7NF10-0AB0?

±5 V, ±10 V, 1-5 V.

What is the current ranges of Siemens 6ES7331-7NF10-0AB0?

±20 mA, 0/4-20 mA.

What should be preserved before replacing Siemens 6ES7331-7NF10-0AB0?

Record the full label, fitted connections and approved SIMATIC S7-300 settings. Preserve the existing wiring and configuration record.

How is Siemens 6ES7331-7NF10-0AB0 checked after installation?

Check diagnostics and the affected sm 331 analog input module functions under the approved site test procedure.

Technical basis

Siemens SIMATIC S7-300 SM 331 product datasheet, 6ES7331-7NF10-0AB0.

Related Siemens references

Siemens 6ES7318-3EL01-0AB0

Siemens 6ES7412-2XG00-0AB0

Siemens 6ES7403-1TA01-0AA0

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