

AMIKON TECHNICAL DOCUMENTATION

Product Data Sheet

Siemens 6ES7331-1KF01-0AB0

Eight-Channel Analog Input Module



MODULE	INPUTS	RESOLUTION	CONNECTOR
SM 331	8 analog	13 bit	40-pin

Siemens 6ES7331-1KF01-0AB0 is an SM 331 analog input module for SIMATIC S7-300, providing eight inputs with thirteen-bit conversion. Its independently configurable channels accept voltage, current, resistance and supported resistance thermometers, with field connections arranged through a 40-pin front connector.

01

VERIFIED TECHNICAL INFORMATION

Analog inputs	8 independently configurable channels
Signal resolution	13 bits, including sign and overrange representation
Voltage measuring ranges	+/-50 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V; 1 to 5 V; 0 to 10 V
Current measuring ranges	+/-20 mA, 0 to 20 mA, 4 to 20 mA
Resistance measuring ranges	0 to 600 ohm and 0 to 6 kohm
Resistance thermometer types	Pt100, Ni100, Ni1000 and LG-Ni1000; standard and climate ranges
Maximum backplane current	90 mA

Manufacturer evidence: S7-300 Automation System Module data; exact-model manual section.

02 TECHNICAL INFORMATION CONTINUED

Typical module power loss	0.4 W
Basic conversion time	66 ms at 50 Hz suppression; 55 ms at 60 Hz suppression
Measurement principle	Integrating, with programmable 50 Hz or 60 Hz interference suppression
Electrical isolation	Between inputs and backplane; no channel-to-channel isolation
Isolation test voltage	500 V DC
Shielded signal cable limits	200 m maximum; 50 m maximum in the 50 mV range
Front connector	40-pin
Interrupts and diagnostics	Not provided

03 SOURCE AND CONFIGURATION CHECKS

The module uses integrating measurement with selectable interference suppression for fifty or sixty hertz conditions. Electrical isolation separates the inputs from the backplane, while configuration defines the measuring range and temperature representation. This version does not provide diagnostic functions or interrupt generation.

Packed dimensions and supplied-unit origin must be checked against the actual delivery. No verified gross shipping weight is inferred from module net mass.

Siemens original documentation and product reference

AMIKON PRODUCT SUPPORT

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