SIEMENS

Data sheet 6AT8000-1BB00-0XA0



SIPLUS CMS-Hardware IFN ANALOG INPUT Acquisition of analog signals "6*ADC; +/-10V; 192kHz; IP67"

General information	
Product type designation	IFN AI
Product description	up to six analog input signals can be measured with the IFN AI
Installation type/mounting	
Mounting type	standard rail
Mounting accessories	Mounting bracket, can be ordered as option
Required clearance	
● for side-by-side mounting at the front	80 mm
● for side-by-side mounting at the top	25 mm
● for side-by-side mounting at the back	25 mm
Supply voltage	
Design of the power supply	stabilized
Rated value (DC)	24 V
permissible range, lower limit (DC)	18 V
permissible range, upper limit (DC)	32 V
Reverse polarity protection	Yes
Overvoltage protection	Yes; max. 35 V
Input current	
from external supply (24 V DC), max.	0.2 A
Power	
Active power input, max.	4.8 W
Analog inputs	
Number of analog inputs	6
Designation of the analog input	CH1 ... CH6
Electrical input frequency, min.	0 Hz
Electrical input frequency, max.	96 kHz
Overvoltage strength, min.	-60 V
Overvoltage strength, max.	60 V
Open-circuit detection	Yes
Short-circuit detection	No
Input ranges	
● Voltage	Yes
Input ranges (rated values), voltages	
● At DC, min.	-10 V
● At DC, max.	10 V
Input ranges (rated values), currents	
● with DC	0.012 mA
Analog value generation for the inputs	
Parameterizable down sampling frequencies	4 / 8 / 16 / 24 / 48 / 64 / 96 kHz

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Sampling frequency, max.	192 kHz
Integration and conversion time/resolution per channel	
● Resolution with overrange (bit including sign), max.	16 bit
Errors/accuracies	
Relative measuring accuracy for analog input signals, min.	-0.5 %
Relative measuring accuracy for analog input signals, max.	0.5 %
Crosstalk attenuation between analog input signals at 1 kHz	-90 dB
Signal-to-noise ratio for analog input signals	-80 dB
Interfaces	
Number of interfaces	3
Transmission rate, max.	400 Mbit/s
Design of plug-in connection	Connector plug 8-pole (M12)
Protocols	
Bus protocol/transmission protocol	IEEE 1394a/b
Potential separation	
Potential separation analog inputs	
● Potential separation analog inputs	Yes
Degree and class of protection	
IP degree of protection	IP67
Standards, approvals, certificates	
Certificate of suitability	CE
CE mark	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
China RoHS compliance	Yes
Use in hazardous areas	
● ATEX	Yes
● IECEx	Yes
Ambient conditions	
Ambient temperature during operation	
● min.	-40 °C
● max.	65 °C
Ambient temperature during storage/transportation	
● Storage, min.	-40 °C
● Storage, max.	85 °C
● Transportation, min.	-40 °C
● Transportation, max.	85 °C
Connection method	
Design of electrical connection for supply voltage	Male connector 5-pole (M12)
Design of electrical connection at input	Connector plug 5-pole (M12)
Design of electrical connection for the PE conductor	M4 screw with contact washer
● Connectable conductor cross-section for PE terminal	2.5 mm²
Mechanics/material	
Material of housing	aluminum
Dimensions	
Width	86 mm
Height	210 mm
Depth	87 mm
Depth when mounted on DIN rail	96 mm
Weights	
Weight (without packaging)	1.23 kg
Classifications	

	Version	Classification
eClass	16	27-20-14-13
eClass	14	27-20-14-13
eClass	12	27-20-14-13

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eClass	9.1	27-20-14-13
eClass	9	27-20-14-13
eClass	8	27-20-14-04
eClass	7.1	27-20-14-04
eClass	6	27-20-14-04
ETIM	10	EC002960
ETIM	9	EC002960
ETIM	8	EC002960
ETIM	7	EC002960
IDEA	4	6306
UNSPSC	15	41-11-36-39

Approvals / Certificates

General Product Approval	EMV








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