

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	
<ul style="list-style-type: none"> for side-by-side mounting at the front 	80 mm
<ul style="list-style-type: none"> for side-by-side mounting at the top 	25 mm
<ul style="list-style-type: none"> 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
Overtoltage 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
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

last modified: 05/28/2020