




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 for side-by-side mounting at the top for side-by-side mounting at the back | 80 mm 25 mm 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 | |
| <ul style="list-style-type: none"> Voltage | Yes |
| Input ranges (rated values), voltages | |
| <ul style="list-style-type: none"> At DC, min. At DC, max. | -10 V 10 V |
| Input ranges (rated values), currents | |
| <ul style="list-style-type: none"> 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 |

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| 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 mm ² |
| 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: | 2/3/2021  |