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## Data sheet 6AT8000-1BB00-4XA0



SIPLUS CMS-Hardware "IFN VIB-A;" "Acquisition of analog signals;" "VIBRATION DETECTION 6*IEPE;" for VIBRATION ACCELERATION "measurement; UW=24 V DC; IP67"

| | |
|---|---|
| **General information** | |
| Product type designation | IFN VIB-ACC |
| Product description | six IEPE sensor signals or five IEPE sensor signals and one analog input signal (e.g. for speed) are measured with the IFN VIB-A |
| **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) | 19.2 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 | 1 |
| Designation of the analog input | CH6 |
| Electrical input frequency, min. | 0 Hz |
| Electrical input frequency, max. | 1 kHz |
| Overvoltage strength, min. | -60 V |
| Overvoltage strength, max. | 60 V |
| Open-circuit detection | No |
| Short-circuit detection | No |
| Input ranges | |
| ● Voltage | Yes |
| Input ranges (rated values), voltages | |
| ● At DC, min. | -30 V |
| ● At DC, max. | 30 V |
| Input ranges (rated values), currents | |
| ● with DC | 0.012 mA |
| **Sensor input** | |


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| Number of sensor inputs | 6 |
| Designation of the sensor inputs | CH1 ... CH6 |
| Design of the sensor | IEPE |
| Sampling frequency, max. | 192 kHz |
| Parameterizable down sampling frequencies | 0.014 / 0,33 / 4 / 8 / 16 / 24 / 48 / 64 / 96 kHz |
| Overvoltage strength, min. | -60 V |
| Overvoltage strength, max. | 60 V |
| Open-circuit detection | Yes |
| Short-circuit detection | Yes |
| **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 |
| **Encoder** | |
| Encoder signals, IEPE | |
| ● Electrical input frequency, min. | 0.1 Hz |
| ● Electrical input frequency, max. | 40 kHz |
| **Errors/accuracies** | |
| Relative measuring accuracy for analog input signals, min. | -1 % |
| Relative measuring accuracy for analog input signals, max. | 1 % |
| Relative measuring accuracy for IEPE signals, min. | -0.7 % |
| Relative measuring accuracy for IEPE signals, max. | 0.7 % |
| Crosstalk attenuation between analog input signals at 1 kHz | -78 dB |
| Crosstalk attenuation between sensor channels CH 1 and CH 2 at 1 kHz | -69 dB |
| Crosstalk attenuation between sensor channels CH 3 ... CH 6 at 1 kHz | -73 dB |
| Signal-to-noise ratio for analog input signals | -69 dB |
| Signal-to-noise ratio between sensor channels CH 1 and CH 2 for IEPE signals | -57 dB |
| Signal-to-noise ratio between sensor channels CH 3 ... CH 6 for IEPE signals | -70 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 | No |
| Galvanic isolation at sensor input | |
| ● Galvanic isolation at sensor input | No |
| **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 |


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| 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) | 1.24 kg |
| **Classifications** | |

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