

Digital Amplifier EtherNet/IP DA-EN

Scope of Supply

Amplifier in DIN Rail Mount enclosure
Standard: 1 channel EtherNet/IP

Device description file on disk

Variant

2EN: 2 channel EtherNet/IP
in DIN Rail Mount enclosure

Additional Options

GK: Enclosure (IP67) with terminals
M: Potted version only with option GK
F: (Potentially explosive atmospheres):
Use with safety barriers



Pic. similar



Other interfaces on request,
e.g. ProfiNet, ProfiBus



EtherNet/IP Strain Gauge Amplifier

Special Features

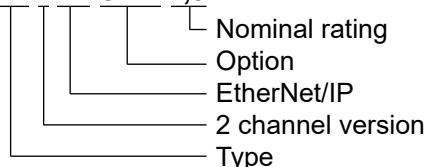
- 24 bit Σ - Δ -AD converter for highest precision
- Very fast cycle time for time-critical applications
- Full- and Halfduplex connections of 10 MBit/s and 100 MBit/s possible
- Support of autonegotiation and auto MDI(X)
- Galvanic separation of bus and application up to 1.5 kV
- ETG certified

The amplifier DA-EN is used whenever full bridge strain gauge sensors (e.g. force sensors) are to be connected with Ethernet/IP networks. The primary field of application is web tension and force measurement.

The sensor signals are converted into digital signals with a cycle time of 0.5 ms. They are averaged and provided to the interface circuit at a distance of approx. 6 ms. From there, they are then switched in the corresponding data format.

Ordering Example

DA-2EN-GKM-1,5



Please consider with the order:

The amplification of the DA-EN is preset and in particular correlation with the nominal rating of the HAEHNE sensor.

Version DA-EN	Nominal rating of the sensor
-1,5	1.5 mV/V
-1,0	1.0 mV/V
-0,75	0.75 mV/V
-0,5	0.5 mV/V

Ordering example for option F:

Indicate the total resistance from measuring chain for option F (e. g. 1000 Ohm):

DA-EN-F1000-1,5

Technical Data

Power supply Attention: The auxiliary power must be grounded!	Power supply	24 V DC (9 ... 36 V)
	Typical current requirements with standard wiring	approx. 150 mA
Strain gauge excitation supply	Voltage (V_4)	10 V DC
	Option J	5 V DC
	Current max.	160 mA
Signal	-160 % ... 0 ... +160 % $\hat{=}$ 8000...0000...7FFF	
Data width	1 word	
Resolution	16 bit	
Enclosure protection	Standard: P20	Variant GK: IP67
Nominal temperature range	0...+60° C	
Terminal cross-section	AWG 24-12	

Terminal Assignment

Terminal	Assignment		Terminal	Assignment	
1	+24 V	Power supply	7	V_{4+}	Sensor A
2	+24 V*		8	V_{4-}	
3	0 V		9	V_{1+}	
4	0 V*		10	V_{1-}	
5	PE		11	V_{4+}	Sensor B
6	GND	12	V_{4-}		
	Reference potential for Ex protection	13	V_{1+}		
			14	V_{1-}	

* Power supply for other devices
The maximum current of 1 Ampere must not be exceeded.

V_1 : Signal voltage V_4 : Supply voltage

Upper side



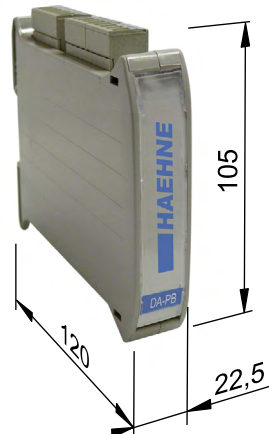
Underneath



Port 1	Port 2
RJ45	RJ45

IP-Adress
DHCP-Modus

Dimensions



Option GK
Width x depth x height
170 x 123 x 67 mm