

# DX Series



## Data Sheet **DX-020 10V**

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# System Overview

The analogue to digital converter series of type „DX“ are specially designed for a large dynamic range and high stability, which makes them suitable for almost all applications.

These ADC's have internal digital calibrations resulting in highly significant signal output. Due to this digital signal processing, all signals have the identical transfer function which allows for high precise post-processing of the data.



## Highlights of the DX Series

- Low power consumption
- Very low noise, large dynamic range and high linearity
- Digital temperature compensation minimizes drifts
- Sensor output digitally error-corrected with respect to scaling and offset
- Small size and lightweight
- Single coaxial cable for power and data introduces minimal magnetic signature



# Technical Data DX-020 10V

<b>No. of channels</b>	3
<b>Diameter</b>	60 mm
<b>Length</b>	165 mm
<b>Weigth</b>	0.5 kg
<b>Power supply</b>	16 VDC, 0.9 W
<b>Interface connector type</b>	LEMO coaxial series 0S, FFA.0S.250
<b>Interface</b>	- PCMCIA type II - Ethernet (Power over Ethernet)
<b>Degree of protection</b>	Standard: IP65, higher protection on request
<b>Input range</b>	$\pm 9.2$ V
<b>Noise @ 1 Hz</b>	< 500 nV/rtHz
<b>Sample rate</b>	0.1 Hz – 10 kHz
<b>Analogue filter</b>	Anti aliasing
<b>Digital filter</b>	0 dB @ DC – fs/3, < -120 dB @ $\leq$ fs/2
<b>Resolution</b>	10 nV
<b>Crosstalk</b>	< 126 dB
<b>Max. bandwidth</b>	4 kHz
<b>Offset error (25 °C)</b>	< 50 $\mu$ T
<b>Offset drift (25 °C)</b>	< 4 $\mu$ V/K
<b>Scale error (25 °C)</b>	< 5 ppm FS
<b>Scale drift (25 °C)</b>	< 1 ppm/K



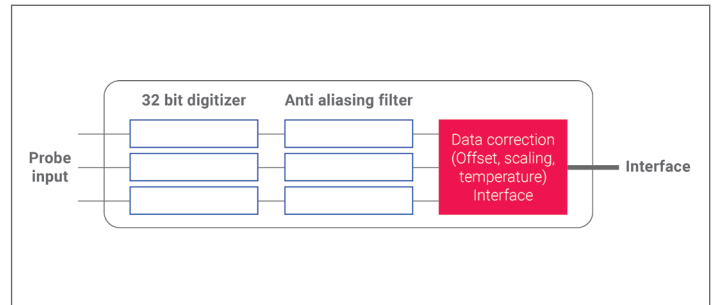
# Illustrations and Figures



*DX-020 10V with coaxial cable (included)*



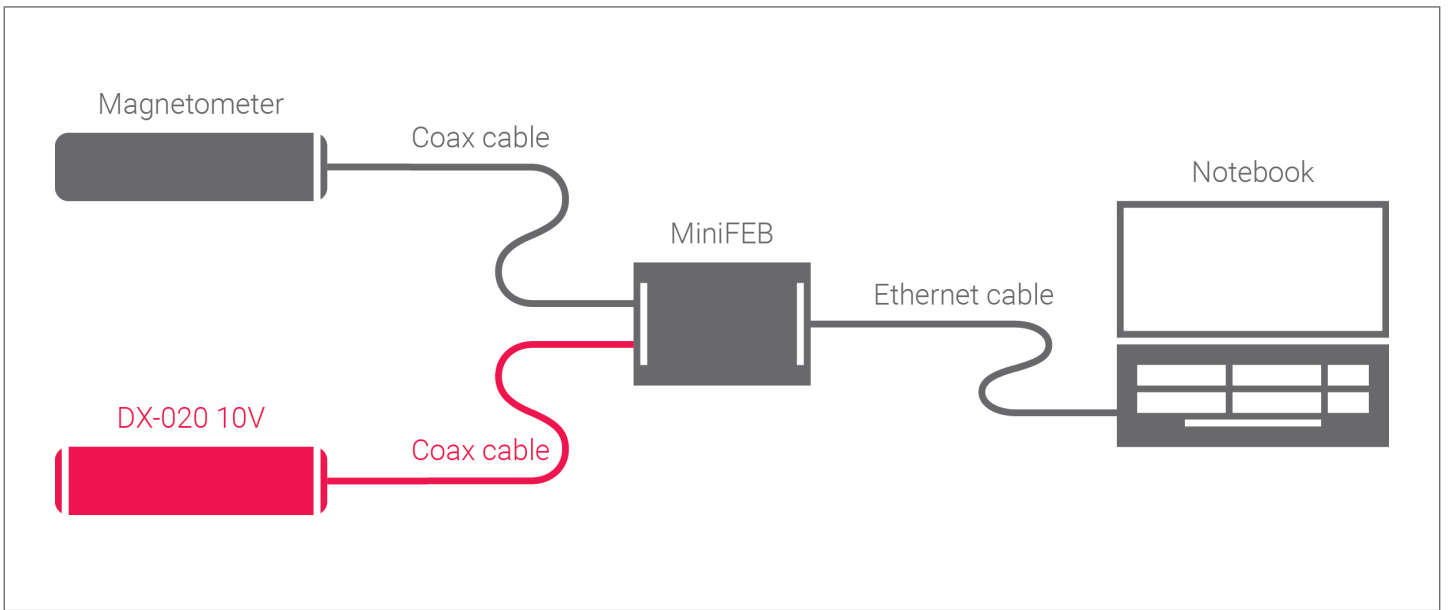
*DX-020 10V sideview*



*Functional overview*



*DX-020 10V coaxial interface*



Component scheme