RECOVIB

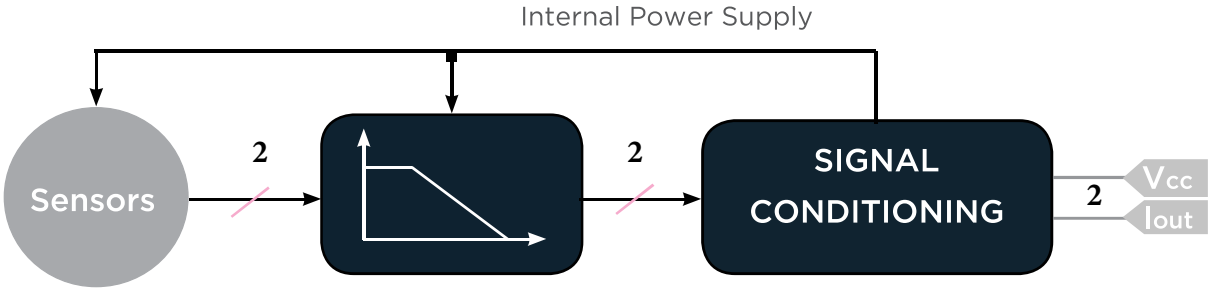
IAC-HiRes-I-02

HIGH RESOLUTION INDUSTRIAL ACCELEROMETER (4-20 mA)

PROPERTIES

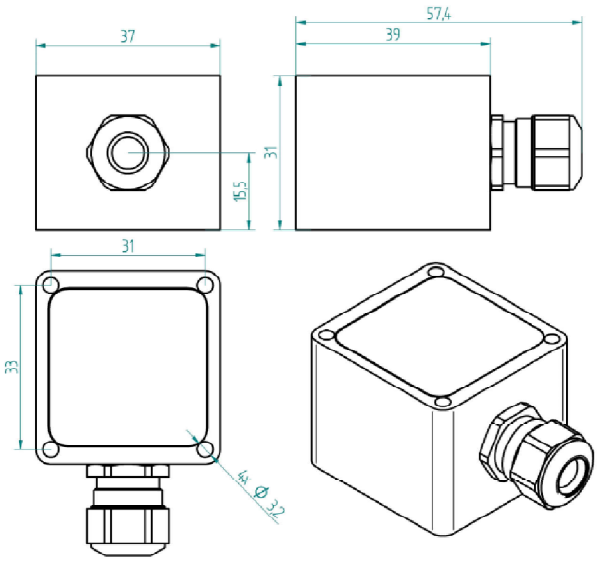
- 2 axis, low noise, high resolution
- Suited for direct connection to standard control and measurement equipment, e.g. PLCs or panel meters
- Embedded 4..20mA signal conditioning
- Galvanically Isolated
- Protected against false polarization
- Compact and rugged design
- Protection grade IP67

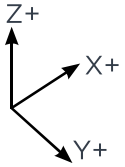
BLOCK DIAGRAM



along XY, XZ or YZ

DIMENSIONS





SPECIFICATIONS - ALL MODELS

OUTPUT / CHANNEL	Output Range	4..20mA	
	Supply voltage	10...30VDC	
	Lower frequency limit	0 Hz (DC)	
	Non-linearity	± 0.5 % F.S.	
	Sensitivity error	0.5 % typ. – 1 % max.	
	Transverse Sensitivity	2 % typ. – 3% max.	
	Offset	0.2 % F.S. typ. – 0.5 % F.S. max.	
	Destruction limit	± 5000g	
ENVIRONMENTAL CHARACTERISTICS		*Operating*	*Non-Operating*
	Operating temperature range	- 40...80°C [1]	- 55...125 °C
	Temperature coefficient of sensitivity	± 0.03 %/°C	
	Temperature drift of zero point	± 0.02 % F.S./°C	
	Protection grade	IP67	
MECHANICAL DATA	Weight Without Cable	100gr (188g[2])	
	Case Material	Aluminum (MIL-A-8625 Type II coating) [2]	
	Mounting	3.2 mm diameter holes (4x)	

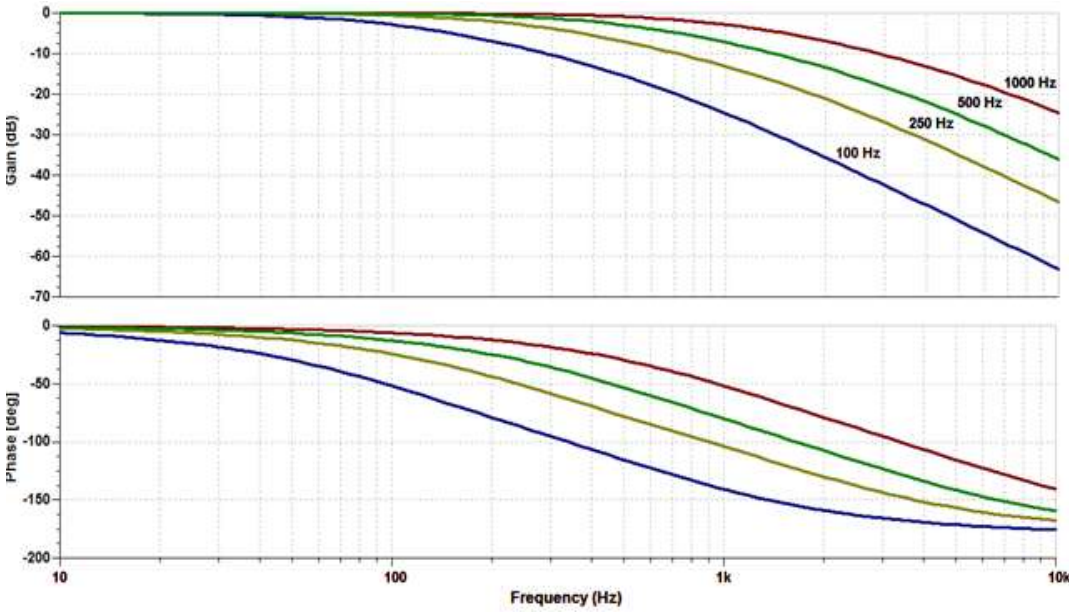
[1] Maximum temperature due to accelerometer cable – operating temperature up to ±125°C possible with special cable upon request

[2] Stainless Steel Casing and Cable Gland A4 (AISI316) Grade Upon Request (e.g. for offshore/marine environment)

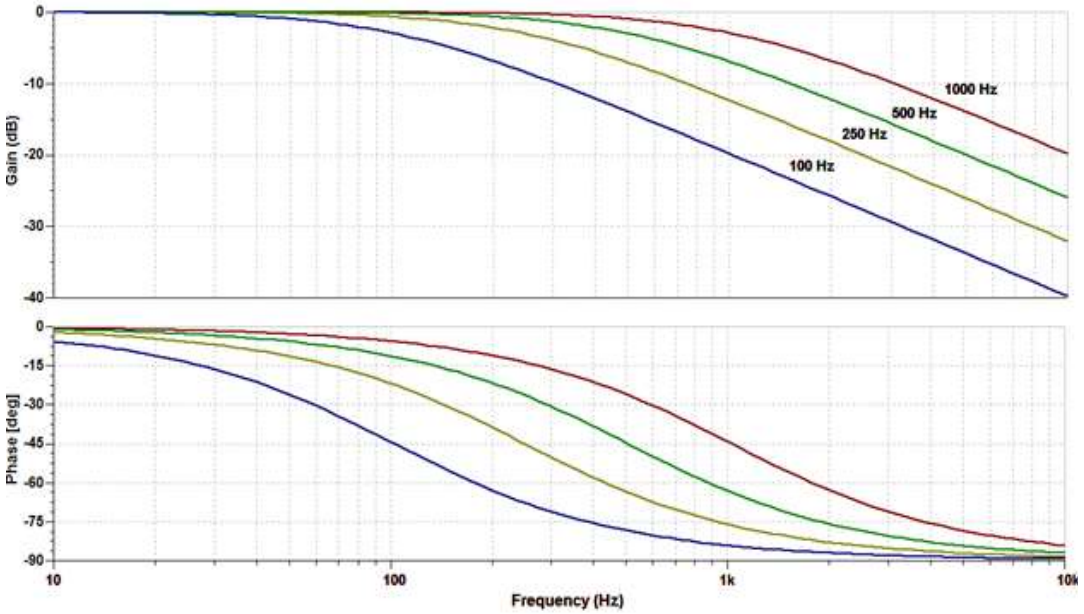
PERFORMANCES - BY MODEL

Range	Sensitivity	Frequency Response (-3dB)	Noise
g	μA/g	Hz	$\mu g/\sqrt{Hz}$
±2	4000	0 – 400	8
±5	1600	0 – 600	10
±10	800	0 – 1000	13
±25	320	0 – 1500	28
±50	160	0 – 2000	53
±100	80	0 – 2500	100
±200	40	0 – 3000	200
±400	20	0 – 4000	400

POSSIBLE FILTER AMPLITUDE RESPONSES

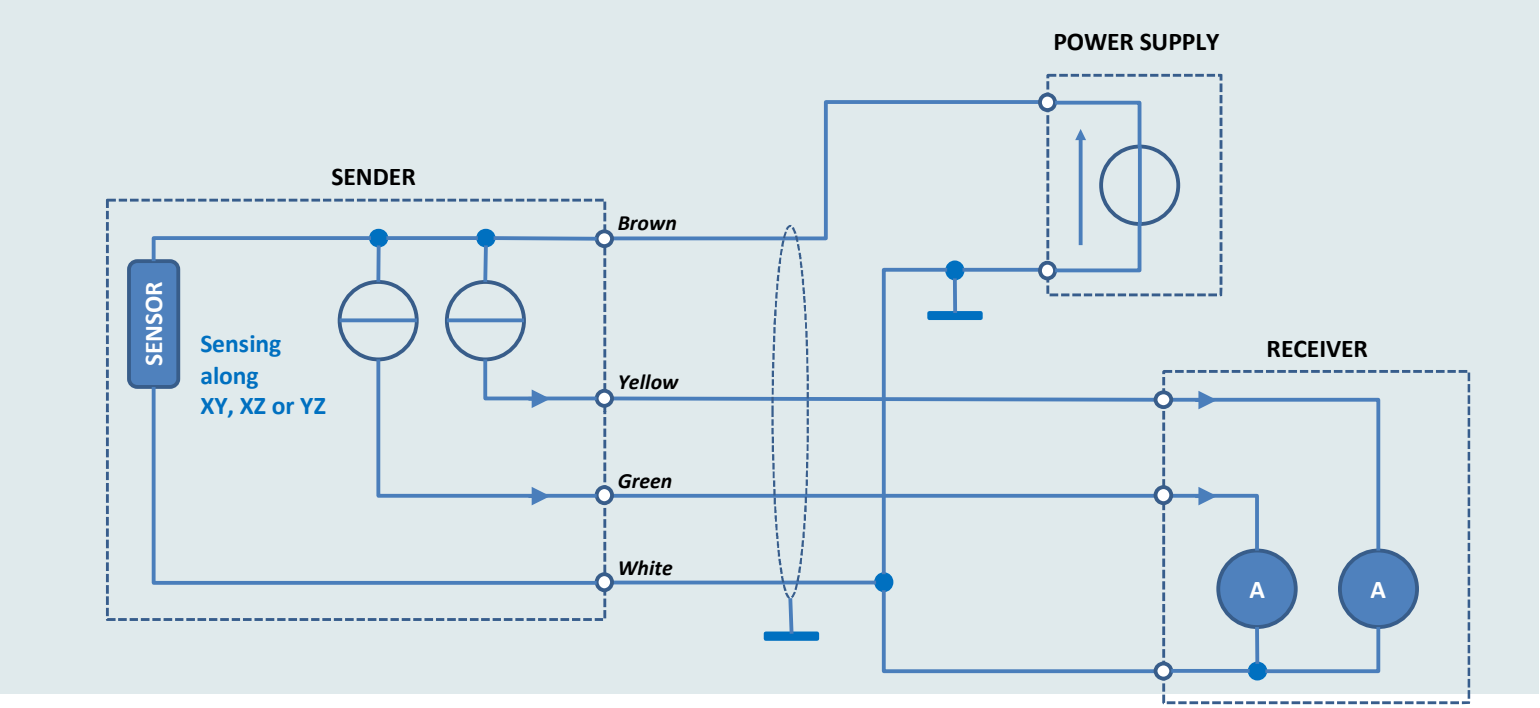


2nd order filters



1st order filters

ELECTRICAL CONNECTIONS



Signal (XY sensing)	Signal (XZ sensing)	Signal (YZ sensing)	2 x 3 x 0.14²
Supply⁺	Supply⁺	Supply⁺	Brown
Supply⁻	Supply⁻	Supply⁻	White
x-axis	x-axis	y-axis	Yellow
y-axis	z-axis	z-axis	Green

ORDERING INFORMATION

IAC - HiRes - I - 02 - AA - X g - XXXX Hz - X - XX.X m

Sensing Axes
XY
XZ
YZ

Range	
2	± 2g
5	± 5g
10	± 10g
25	± 25g
50	± 50g
100	± 100g
200	± 200g
400	± 400g

Low Pass Filter Frequency	
0100	100Hz
0250	250Hz
0500	500Hz
1000	1000Hz

Filter Order	
1	1st order
2	2nd order

Cable Length

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