

Hydrophone AR0190XS



The AR0190XS is a pre-amplified omnidirectional hydrophone, suitable for a wide range of applications requiring working frequencies up to the ultrasonic range (170 kHz). This device has been developed to fit where no much space is available such as AUVs or ROVs. This model comes from the GP family but with modified electronics and mechanics.

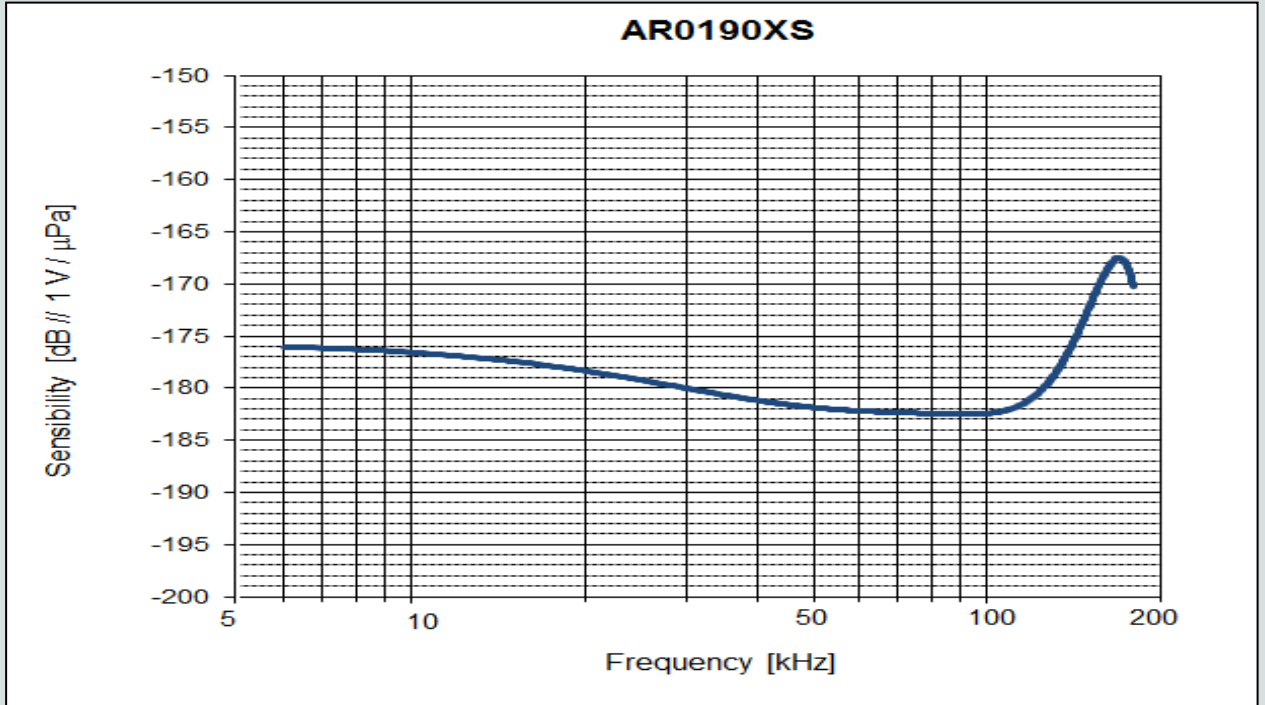


- High sensitivity, low self noise
- Ultra small, suitable for AUVs and ROVs
- Working band up to 170 kHz
- Single or differential output
- Calibration input
- Ultra low power consumption
- Highly customizable (total gain, Hp and Lp filters, cable length and connector type)

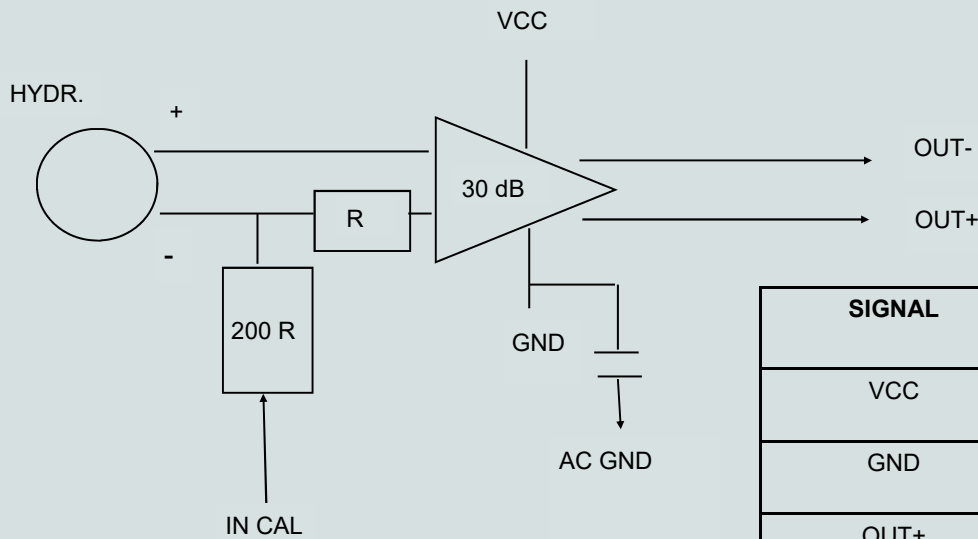
Working band:	5Hz –170.000 Hz
High pass and Low pass filter on preamplifier :	Customizable (on demand)
Differential output standard sensitivity:	-169 dB re 1V/uPa @5kHz
Single output standard sensitivity:	-175 dB re 1V/uPa @5kHz
Directivity :	Spherical - Omnidirectional
Max working depth :	1000 m
Standard Gain @ 5 kHz:	30dB (single out), 36dB (balanced out), Customizable.
Equivalent input acoustic noise @5kHz:	41 dB re 1uPa / sqrtHz
Input impedance:	10 MOhm
Supply voltage range:	From 3.3 to 16 Vdc
Current consumption:	4mA @ 3.3 Vdc
Output voltage swing:	3 Vpp (single output), 6Vpp (differential output)
Dimensions:	135mm x 25mm
Weight in air:	160 gr
Body construction:	Stainless steel AISI 316

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RECEIVING SENSITIVITY (ON SINGLE OUTPUT)



HYDROPHONE DIAGRAM



SIGNAL	SEACON MCIL 5M
VCC	PIN 1
GND	PIN 2
OUT+	PIN 3
OUT-	PIN 4
IN CAL	PIN 5
AC GND (to hydr. Metal Jacket)	—