

PRODUCT DATA SHEET

PK30I Sensor
Integral Pre-amplifier Sensor

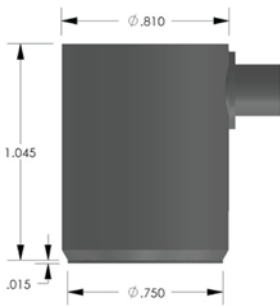


DESCRIPTION AND FEATURES

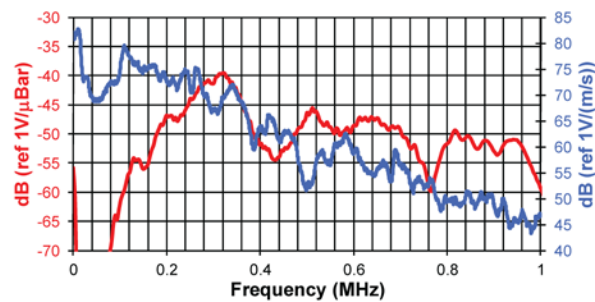
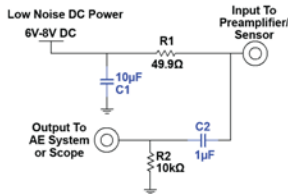
The PK30I is a narrow band sensor featuring an integral, ultra low noise and low power preamplifier. The bandpass filtered preamplifier has a gain of 26dB which can drive up to 200 meters of cable. The sensor has a resonance frequency around 300kHz. The PK series sensors represent an improvement in both noise and power consumption. With noise level below 3 μV and power consumption as little as 25 mW, the sensor is ideal for use with battery powered portable equipment. The PK30I features a rugged stainless steel, integrated body structure.

APPLICATIONS

PK30I sensor has been designed to be used with pocket AE system, a small hand-held AE system, or with Highway-II an outdoor rated, on-line monitoring system.



Power/Signal Connections



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s)	82 dB
Peak Sensitivity, Ref V/μbar	-39 dB
Operating Frequency Range	200-450 kHz
Resonant Frequency, Ref V/(m/s)	300 kHz
Resonant Frequency, Ref V/μbar	350 kHz
Directionality	+/-1.5 dB

Environmental

Temperature Range	-35 to 75°C
Shock Limit	500 g
Completely enclosed crystal for RFI/EMI immunity	

Physical

Dimensions	0.81" OD X 1.06" H 20.6 mm OD X 27 mm H
Weight	51 grams
Case Material	Stainless Steel (304)
Face Material	Ceramic
Connector	SMA
Connector Locations	Side

Electrical

Gain	26 dB
Power Requirements	4-7 VDC @ 5 mA
Dynamic Range	>87 dB
Noise Level (RMS RTI)	<3 μV
Output Drive Impedance	50 Ω
Grounding	Case Grounding (isolated from mounting surface)

ORDERING INFORMATION AND ACCESSORIES

PK30I	PK30I
Cable (specify length in 'XX' m)	1234-SMA/BNC-X
Magnetic Hold-Down	MHR30I
Preamp to System Cable (specify length in 'm')	1234-X
Amplifier Subsystems	AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty

