



PK61 Sensor

Medium Frequency

Resonant Acoustic Emission Sensor

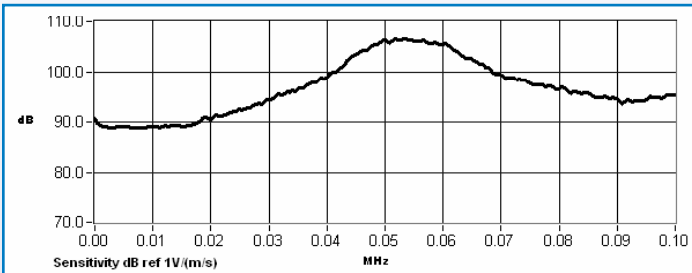
Description and Features

The PK61 sensor is a medium frequency, resonant, acoustic emission sensor with an integral, ultra low noise, low power, filtered, 26dB preamplifier, which can drive up to 100ft of cable. This new sensor represents an improvement in both noise and low power consumption performance, with noise level below 3 uV and power consumption of 25 mW. The PK61 features a strong stainless steel, integrated body structure. The sensor has smaller size and the same frequency response as the R61 sensor.

The integrated Auto Sensor Test (AST*) capability allows these sensors to pulse as well as receive. This feature lets you verify the sensor coupling and performance at any time before, during or after the test.

Applications

The PK61 sensor has been designed to be used with Pocket AE and Sensor Highway II Systems as a small hand held system.



* AST -- Auto Sensor Testing feature allows AE systems to control the sensor as a pulser and a receiver at the same time. It can therefore characterize its own condition as well as send out a simulated acoustic emission wave that other sensors can detect, so the condition of the nearby sensors also can be tested.

Operating Specifications

Dynamic

Peak Sensitivity, Ref V/(m/s)	106 dB
Operating Frequency Range	40 to 70 KHz
Resonant Frequency, Ref V/(m/s).....	55 KHz
Directionality.....	+/- 1.5 dB

Environmental

Temperature Range	-35° to 80° C
Shock Limit	500 g

Physical

Dimensions.....	0.812D X 1.06H/20.6 X 27
Weight.....	45 grams
Case Material.....	Stainless Steel
Face Material.....	Ceramic
Connector.....	SMA
Connector Locations	side

Electrical

Input Voltage Range (VDC)	4-7
Operating/Max Current (mA)	5/35
Internal Preamp Gain	26dB
Noise RTI (referred to input μ V)	<3

Ordering Information and Accessories

PK61	PK61
Cable (specify cable length in meters) . 1234-SMA/BNC-X	
Magnetic Hold-Down	MHPK15I
Amplifier Subsystem	AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty



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