

PRODUCT DATA SHEET

Mini30S Sensor

Miniature Sensor

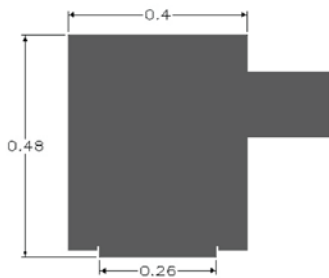


DESCRIPTION AND FEATURES

Mini30S sensor features a rugged stainless steel cavity with an integrated cable. Its small size and high bandwidth makes the sensor an ideal candidate for applications where high fidelity AE signals from multiple modes are a necessity. The sensor features a small diameter, a BNC connector at the end of a coaxial cable exiting from the side of the sensor.

APPLICATIONS

The high sensitivity and bandwidth makes it ideal for structural health monitoring of critical structures like aircrafts, storage tanks etc. Typical applications include monitoring for fatigue and corrosion cracking in metals, delaminations and fiber breakage in composites. With its high bandwidth it can be used in applications requiring frequency analysis to determine the sources of AE signals and noise discrimination. It can be mounted easily using epoxy.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s).....	62 dB
Peak Sensitivity, Ref V/ μ bar.....	-65 dB
Operating Frequency Range.....	270-970 KHz
Resonant Frequency, Ref V/ μ bar.....	325 KHz
Directionality.....	+/- 1.5 dB

Environmental

Temperature Range.....	-65 to 177°C
Shock Limit.....	500 g
Completely enclosed crystal for RFI/EMI immunity	

Physical

Dimensions.....	0.4"OD X 0.5"H
.....	10 mm OD X 12 mm H
Weight.....	6 grams
Case Material.....	Stainless steel
Connector.....	BNC on integral cable
Connector Locations.....	Side exit coax, .05" dia and 36" long

ORDERING INFORMATION AND ACCESSORIES

MINI30S.....	MINI30S
Cable (specify cable length in 'm').....	1 m
Preamplifier.....	0/2/4, 2/4/6
Preamp to System Cable (specify length in 'm').....	1234-X
Amplifier Subsystems.....	AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty

