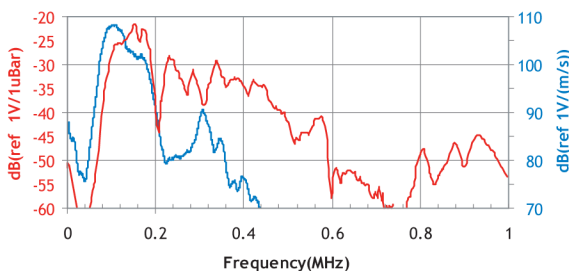
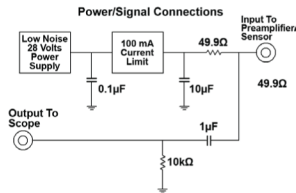
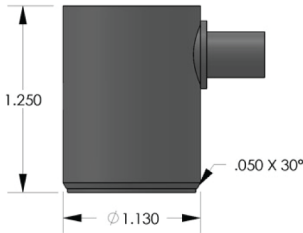


PRODUCT DATA SHEET

CH15I Sensor
Integral Pre-amplifier Sensor



DESCRIPTION AND FEATURES

The CH15I sensor is a medium frequency, resonant, acoustic emission sensor with an integral, low noise, filtered, 40 dB preamplifier that can drive up to 1000 feet of cable. The sensor comes standard with PAC's unique "Auto Sensor Test" (AST*) function.

The CH15I features a strong, insulated, lightweight, aluminum alloy, integrated body structure that is color-coded blue to identify the sensor model. This sensor's outside shell is anodized, providing a nonconductive finish to prevent any possible electric shorts from metal testing structures. It is the same size and has the same frequency response and sensitivity as the R15I sensor, but the EMI shielding ability of the CH15I has been improved by more than 300% compared with previous versions.

APPLICATIONS

- Metals
- Bucket trucks
- Compressed gas cylinders
- Pressure vessels
- Cranes
- Structures

OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s).....	109 dB
Peak Sensitivity, Ref V/µbar.....	-22 dB
Operating Frequency Range.....	100-200 kHz
Resonant Frequency, Ref V/(m/s).....	75 kHz
Resonant Frequency, Ref V/µbar.....	150 kHz
Directionality.....	+/-1.5 dB

Electrical

Gain.....	40 dB
Power Requirements.....	16-30 Vdc @ 25 mA
Dynamic Range.....	>80 dB
Output Voltage.....	20 V peak to peak
Noise Level (RMS RTI).....	<2.4 µV
Output Drive Impedance.....	50 Ω
Sensor Drive Capability.....	up to 1000 ft (300 m)
AST Pulse.....	24 V, 3 microseconds into crystal
Grounding.....	Case grounded, isolated from sensing face

Environmental

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

Physical

Dimensions.....	1.13"OD X 1.28"H
	29 mm OD X 32.6 mm H
Weight.....	51 grams
Case Material.....	Blue color, anodized aluminum alloy
Face Material.....	Ceramic
Connector.....	BNC
Connector Locations.....	Side
Seal.....	Epoxy
Matching Cable.....	1234-X

ORDERING INFORMATION AND ACCESSORIES

CH15I.....	CH15I
Cable (specify length in '-XX' m at end of PN).....	1234 - X
Magnetic Hold-Down.....	MHR15I
Amplifier Subsystems.....	AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty

