

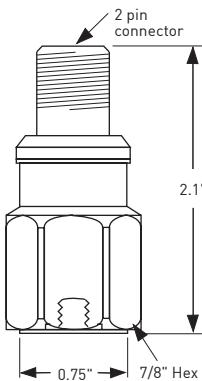


# Wilcoxon Research



## Features

- Contains transducer electronic data sheet (IEEE 1451 - TEDS)
  - Self-identifying
  - Corrosion resistant
  - Ground isolated
  - Rugged design
  - Hermetic seal
  - ESD protection
  - Reverse wiring protection



## Benefits

- Simplifies troubleshooting
  - Reduces safety risks - no more climbing on machines to verify connections
  - Reduces costs for set-up and tear-down
  - No need to recalibrate replacement units - data acquisition system will recalibrate itself
  - Designed to integrate with wireless transmitters and receivers
    - eliminates long cables
    - reduces installation, maintenance and upgrade costs of measurement and control systems

# Model ED-786A

## TEDS general purpose accelerometer

## Dynamic

<b>Dynamics</b>	
Sensitivity, $\pm 5\%$ , 25°C.....	100 mV/g
Acceleration range .....	80 g peak
Amplitude nonlinearity.....	1%
<b>Frequency response:</b>	
$\pm 5\%$ .....	3 - 5,000 Hz
$\pm 10\%$ .....	1 - 9,000 Hz
$\pm 3$ dB .....	0.5 - 14,000 Hz
<b>Resonance frequency</b> .....	30 kHz
<b>Transverse sensitivity, max</b> .....	5% of axial
<b>Temperature response</b> .....	-50°C      -5% +120°C      +5%

# Electrical

Power requirement:	voltage source .....	18 - 30 VDC
	current regulating diode .....	2 - 10 mA
Electrical noise, equiv. g:		
Broadband	2.5 Hz to 25 kHz.....	700 µg
Spectral	10 Hz.....	10 µg/VHz
	100 Hz.....	5 µg/VHz
	1000 Hz.....	5 µg/VHz
Output impedance, max.	.....	100 Ω
Bias output voltage.....		12 VDC
Grounding.....		case isolated, internally

## Environmental

<b>ENVIRONMENT</b>	
Temperature range <sup>1</sup> .....	-50 to 120°C
Vibration limit .....	500 g peak
Shock limit .....	5,000 g peak
Electromagnetic sensitivity, equiv. g, max .....	70 µg/gauss
Sealing .....	Hermetic
Base strain sensitivity, max .....	0.0002 g/strain

Physical

Sensing element design .....	PZT ceramic / shear
Weight .....	95 grams
Case material .....	316L stainless steel
Mounting .....	1/4 - 28 UNF tapped hole
Output connector .....	2 pin, MIL-C-5015 style
Mating connector .....	R6 type
Recommended cabling .....	J10 / J972A

Connector pin	Function
Shell	ground
A	power/ signal
B	common

Notes: <sup>1</sup>Temperature range is limited to -40°C to +85°C when using the IEEE 1451 - TEDS function.

Accessories supplied: SF6 mounting stud (International customers specify mounting requirements); TEDS calibration data

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