

Seismic accelerometer and power amplifier system

731A/P31

SPECIFICATIONS

Acceleration sensitivity, selectable	10, 100, 1000 V/g		
Velocity sensitivity, selectable	0.1, 1, 10 V/in/sec		
Vibration range, max	0.5 g peak		
Amplitude nonlinearity	1%		
Frequency response:			
Filter	100 Hz	450 Hz	velocity
-10%	0.08 - 70 Hz	0.08 - 300 Hz	---
-3 dB	0.05 - 100 Hz	0.05 - 450 Hz	0.8 - 150 Hz
Transverse sensitivity, max	1% of axial		
Output impedance	2500 Ω		
Recommended load impedance	>250 kΩ		
Maximum output voltage	5 V peak		
Noise:			
Spectral	2 Hz	0.03 µg/√Hz	
	10 Hz	0.01 µg/√Hz	
	100 Hz	0.004 µg/√Hz	
Grounding	case isolated		
Output connector:	731A	2 pin, MIL-C-5015	
	P31	BNC	
Input connector (P31)	twin axial BNC		
Power requirements (P31):			
Internal batteries	Two 9-volt alkaline		
Battery life	>75 hours		
Temperature range	-10° to +65°C		
Vibration limit	10 g peak		
Shock limit	fragile		
Base strain sensitivity	0.0001 g/µstrain		
Sensing element design	PZT ceramic / flexure		
Weight:	731A	760 grams	
	P31	600 grams	
Interconnect cable, 731A to P31	R6-2T-J9-10		

Note: Special handling required due to sensitivity.
Accessories supplied: SF7 mounting stud; calibration data (level 3)

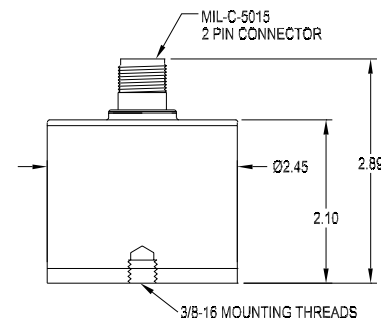
CONNECTIONS

OUTPUT	Connector	Function	Cable	INPUT	Connector	Function	Cable
731A	A	power/signal	white	P31	pin	power/signal	white
	B	common	black		socket	common	black
	shell	case	shield		shell	ground	shield
P31	pin	signal	center conductor				
	shell	common	shield				

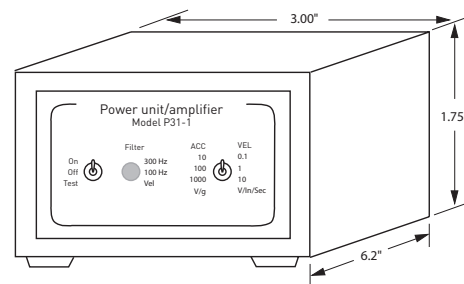


Key features

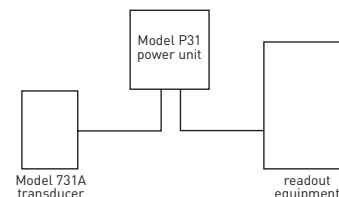
- Ultra high sensitivity
- Ultra low-noise electronics
- Manufactured in ISO 9001 facility



Model 731A



Model P31



Powering with P31 power unit

Note: Due to continuous process improvement, specifications are subject to change without notice.
This document is cleared for public release.