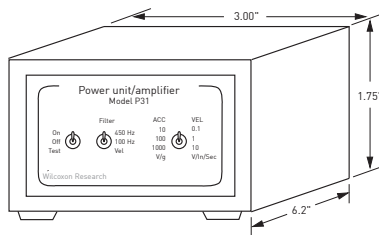


Model P31 Ultra low noise power unit/ amplifier

Features

- Powers Model 731 seismic accelerometer
- Ultra low noise
- Amplifies signal X1, X10, X100
- Switchable output: acceleration or velocity
- Battery powered
- Wide dynamic range - 120 dB
- Switchable low pass filter 450 Hz or 100 Hz
- Low current draw
- Battery test light



	P31	Units
Input characteristics		
Voltage to transducer	18	VDC
Current to transducer, $\pm 20\%$	2.4	mA
Maximum input voltage (gain = 1)	3.5	V rms
Output characteristics		
Output impedance, nominal	2500	Ω
Recommended load Impedance	>250	k Ω
Maximum output voltage	3.5	V rms
Output mode, switchable	acceleration velocity	V/g V/in/sec
Spectral noise, 1 - 10 Hz, referred to input	<-140	dB
Transfer characteristics		
Gain, acceleration	10, 100, 1000	V/g
Gain, velocity	0.1, 1, 10	V/in/sec
Gain accuracy	± 0.25	dB
Frequency response, -3 dB		
Acceleration (450 Hz Filtered)	0.05 - 450	Hz
Acceleration (100 Hz Filtered)	0.05 - 100	Hz
Velocity	0.8 - 150	Hz
Amplitude nonlinearity	<1	%
Total harmonic distortion	<1	%
Power requirements		
Internal batteries	(2) 9 V alkaline	
Battery life	> 50	hrs
Environmental		
Temperature range	0 to 55	$^{\circ}\text{C}$
Relative humidity, max.	90	%
Physical characteristics		
Weight	1.4	lb
Dimensions	3 W x 1 $\frac{7}{8}$ H x 6 D	inch
Connectors: Signal input	Amphenol 31-2225	twinax
Signal output	BNC	

Note: For multi-channel requirements, consult the factory for information about the PR710 series, 10 channel power unit/amplifier.
Accessories supplied: (2) 9 V alkaline batteries.

98443 Rev.H.1 11/01

We reserve the right to vary the foregoing details without prior notice



ALTHEN GmbH Mess- und Sensortechnik

Frankfurter Strasse 150 - 152
65779 Kelkheim / Germany

phone: +49 (0)6195 70060
fax: +49 (0)6195 700666

sales@althensensors.com
www.althensensors.com