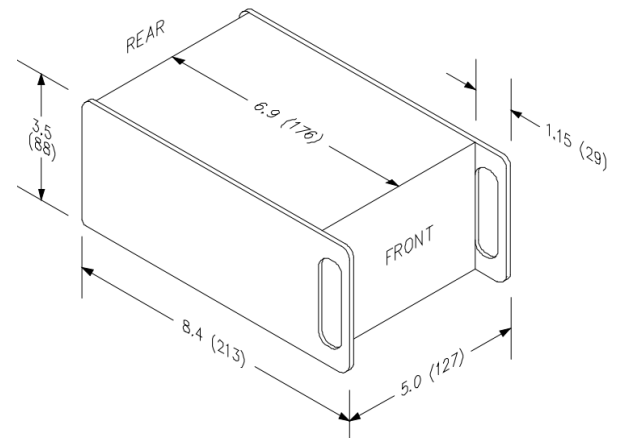


Model 781

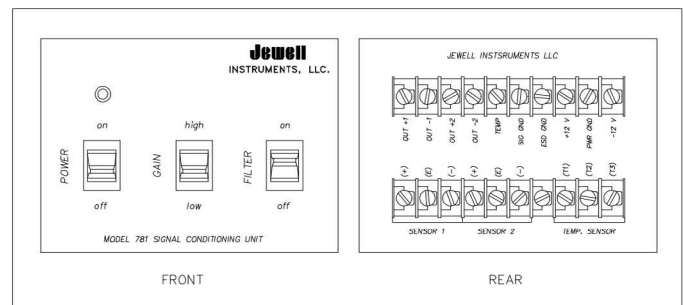
Bench-top Signal Conditioner

The model 781 is a precision, two-channel bench-top signal conditioner for use with all Jewell miniature tilt sensors. Powerful electronics generate balanced AC sensor excitation for up to two tilt channels (X and Y), then amplify, rectify and filter sensor response to produce a high-level DC output signal. Output is ± 8 VDC single-ended (± 16 VDC differential).

Units conveniently come with two switchable gain and filter settings (high/low; on/off) for added signal processing flexibility. The 781 also includes an amplifier for one LM35 temperature sensor, and will drive tilt and temperature signals over 1000m cable lengths. All units include calibration when ordered with Jewell Instruments miniature tilt sensors. Rugged and reliable, the 781 is an ideal choice for any laboratory application.



Panel Configuration:



PERFORMANCE SPECIFICATIONS

INPUT CHANNELS	Two Tilt Channels (X and Y tilt), One LM35 Temp. Sensor			
OUTPUT SIGNALS	±8 VDC Single-ended (±16 VDC differential)			
GAIN SETTINGS	Two switchable gains, 10:1 ratio			
STANDARD CALIBRATION	<u>Sensor Type</u> 755-series 756-series	<u>High-Gain</u> 0.1 μradian/mV 0.1 °/V	<u>Low-Gain</u> 1.0 μradian/mV 1.0 °/V	<u>Range</u> ±8000 μradian ±8.0°
OUTPUT FILTERS	Filter "On" = 7.5 sec; Filter "Off" = 0.05 sec ¹ ; Roll-off = 6 dB/octave			
TEMPERATURE OUTPUT	0.1 °C/mV (single-ended)			
OUTPUT IMPEDANCE	270 Ohms			
POWER REQUIREMENTS	±11 to ±15 VDC @ +11 and -6 mA, 250 mV ripple max., reverse polarity protected			
CONNECTIONS	Dual screw-terminal barrier strips on rear panel			
ENVIRONMENTAL	-25° to +70°C Operation, -30°C to +100°C Storage, 0-90% humidity non-condensing			
MATERIALS	Painted Aluminum			
DIMENSIONS AND WEIGHT	3.5 x 5 x 8.4 inches (88 x 127 x 213 mm), 2 lb (0.9 kg)			
ACCESSORIES	1 m cable included			

Specifications subject to change without notice on account of continued product development

ORDERING CODE

MODEL NO.	DESCRIPTION
781	Signal Conditioner, 2 Channel, Benchtop, 2 Gains, 2 Filters, ±8 VDC Output (Single-ended)