

## Model F879886

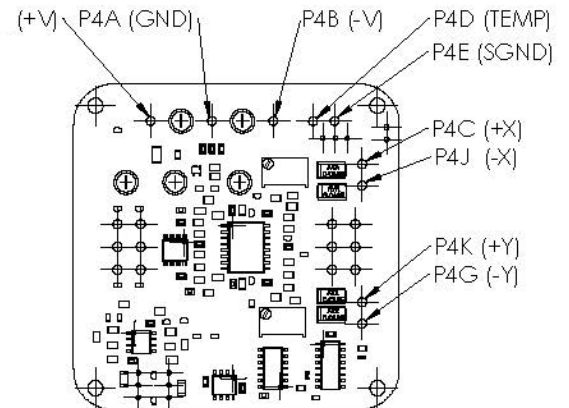
### Dual-channel Signal Conditioning Card

The model F879886 is a precision, two-channel signal conditioning card 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  $\pm 8$  VDC single-ended ( $\pm 16$  VDC differential).

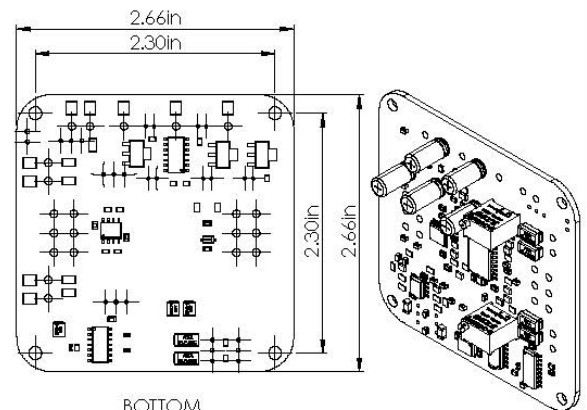
Units conveniently come with two switchable gain and filter settings (high/low; on/off) for added signal processing flexibility. The F879886 also includes an amplifier for one LM35 temperature sensor. All units include calibration when ordered with Jewell Instruments miniature tilt sensors. Use the model F879886 for peak performance from our 755-, 756-, or ceramic tilt sensor packages.

#### PIN OUTS

<b>A</b>	BLACK	POWER GROUND
<b>B</b>	PURPLE	- V IN
<b>C</b>	GREEN	SIG + X
<b>D</b>	YELLOW	TEMPERATURE OUT
<b>E</b>	WHITE	SIGNAL GROUND
<b>F</b>	DRAIN WIRE	CASE/EARTH GROUND
<b>G</b>	BLUE	SIG + Y
<b>H</b>	RED	+V IN
<b>J</b>	GREY	SIG - X
<b>K</b>	BROWN	SIG - Y



TOP



BOTTOM

Dimensions: in [mm]

# PERFORMANCE SPECIFICATIONS

<b>INPUT CHANNELS</b>	Two Tilt Channels (X and Y tilt), One LM35 Temp. Sensor			
<b>OUTPUT SIGNALS</b>	±8 VDC Single-ended (±16 VDC differential)			
<b>GAIN SETTINGS</b>	Two switchable gains, 10:1 ratio			
<b>STANDARD CALIBRATION</b>	<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°
<b>OUTPUT FILTERS</b>	Filter "On" = 7.5 sec; Filter "Off" = 0.05 sec; Roll-off = 6 dB/octave			
<b>TEMPERATURE OUTPUT</b>	0.1°C/mV (single-ended)			
<b>OUTPUT IMPEDANCE</b>	270 Ohms			
<b>POWER REQUIREMENTS</b>	±11 to ±15 VDC @ +11 and -6 mA, 250 mV ripple max., reverse polarity protected			
<b>CONNECTIONS</b>	Sensor: Au-plated 100 mil header pins; Power/signal: 3-ft tinned pigtail			
<b>ENVIRONMENTAL</b>	-25° to +70°C Operation, -30°C to +100°C Storage, 0-90% humidity non-condensing			
<b>MATERIALS</b>	Fiberglass PCB, thru-holed soldered components			
<b>DIMENSIONS AND WEIGHT</b>	2.66 x 2.66 x 1.12 inches (includes switches), 30 g			

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

## ORDERING CODE

MODEL NO.	PART NO.	DESCRIPTION
F879666	600-00017-ROHS	Dual Channel Signal Conditioning Card, Square, 2 Gains, 2 Filters, ±8 VDC Output (Single-ended). ROHS compliant.