



0729-1751, 1752, 1753 Series Mini Signal Conditioner Boards

These production ready mini signal conditioner series from The Fredericks Company are microprocessor-based printed circuit boards capable of driving one or two electrolytic tilt sensors. The boards can be provided with a built-in wide-range, dual axis tilt sensor or can be operated with up to two external sensors. The signal conditioners can be configured for single axis, dual axis (X and Y in the same sensor), or two single axis modes (X and Y with two separate sensors). Each version has a built-in temperature sensor. There are three different outputs available: SPI, RS-232 and Analog/PWM. *These boards are cost-effective and can be integrated into a larger system in a production environment. They are also an easy way to evaluate tilt sensors.*

Actual Size:

1.25 x 1.25 inches square
(32mm x 32mm square)

Specifications

Power supply voltage.....3 to 5 VDC (regulated)
 Angle Range.....0-100% of sensor range
 Temperature sensor range-40°C to +125°C (10 bit resolution)
 Operating temperature range (board only)-40°C to +85°C
 Storage temperature range (board only).....-55°C to +100°C

SPI Board (Part Number: 0729-1751-99) board only (Part number: 6200-005)

Power supply current.....6mA @ 5VDC, 3.5mA @ 3.3VDC
 SPI output16 bit total value
 Data rate (clock)..... 500 kHz to 20 MHz - 8 bit clock

RS-232 Board (Part Number: 0729-1752-99) board only (Part number: 6200-006)

Power supply current.....16mA @ 5VDC, 11mA @ 3.3VDC
 RS-232 Output.....16 bit in ASCII
 Communications settings.....9600 baud/ 8 data bits / No parity / 1 stop bit

Analog / Digital Board (Part Number: 0729-1753-99) board only (Part number: 6200-007)

Power supply current.....15mA @ 5VDC, 10mA @ 3.3VDC
 Max. output voltagePower supply voltage (ratiometric)
 Min. output voltage.....0 VDC
 PWM resolution.....16 bit (1% – 99%)

Size: 1.25 x 1.25 inches or 32mm x 32mm square

NOTE: 0729 assemblies include the 0717-4318-99 sensor. If a different sensor is needed, specify board only part number and sensor type separately.