

0729-1751, 1752, 1753, 1754 Series

Mini- Signal Conditioner Boards







DATA SHEET

Actual size: 1.25 X 1.25 "square (32mm X 32mm square)

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, RS-485, 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.*

Specifications

Description

Power supply voltage3 to 5 VDC (regulated)Angle range0 -100% of sensor rangeTemperature sensor range-40°C to + 125°C (10 bit resolution)Operating temperature range (board only)-40°C to + 85°CStorage temperature range (board only)-55°C to +100°CSPI Board (Part Number: 0729-1751-99)Board only (Part Number: 6200-005)Power supply current6mA @ 5VDC, 3.5mA @ 3.3 VDCSPI Output16 bit total valueData rate (clock)500 kHz to 20 MHz - 8 bit clockRS-232 Board (Part Number: 0729-1752-99)Board only (Part Number: 6200-006)Power supply current16mA @ 5VDC, 11mA @ 3.3 VDCRS-232 output16 bit in ASCIICommunications settings9600 baud / 8 data bits / No parity / 1 stop bitAnalog / Digital Board (Part Number: 0729-1753-99)Board only (Part Number: 6200-007)Power supply current15mA @ 5VDC, 10 mA @ 3.3 VDCAnalog / Digital Board (Part Number: 0729-1753-99)Board only (Part Number: 6200-007)Power supply current15mA @ 5VDC, 10 mA @ 3.3 VDCMax, output voltagePower supply voltage (ratiometric)Min. output voltage0 VDCPWM resolution16 bit (1% - 99%)RS-485 Board (Part Number: 0729-1754-99)Board only (Part Number: 6200-008)Power supply current9mA @ 5VDC, 3mA @ 3.3 VDCRS-485 output16 bit in ACSIICommunications settings9600 baud / (1200 to 38400) / 8 data bits / NoPower supply current9mA @ 5VDC, 3mA @ 3.3 VDCRS-485 output16 bit in ACSIICommunica		
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parity/ 1 stop bit	Communications settings	9600 baud / (1200 to 38400) / 8 data bits / No
		parity/ 1 stop bit

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 the sensor type separately.