



0729-1751, 1752, 1753, 1754 Series

Mini- Signal Conditioner Boards



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

Description

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

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 @ 3.3 VDC
SPI Output	16 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 @ 3.3 VDC
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, 10 mA @ 3.3 VDC
Max. output voltage	Power supply voltage (ratiometric)
Min. output voltage	0 VDC
PWM resolution	16 bit (1% - 99%)

RS-485 Board (Part Number: 0729-1754-99)	Board only (Part Number: 6200-008)
Power supply current	9mA @ 5VDC, 3mA @ 3.3 VDC
RS-485 output	16 bit in ACSII
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.