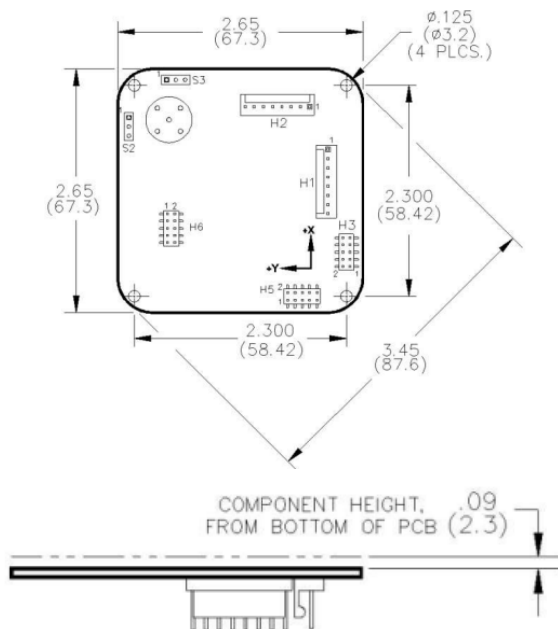


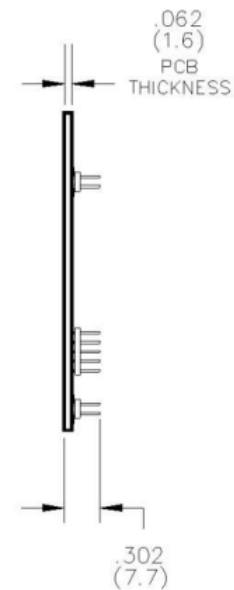
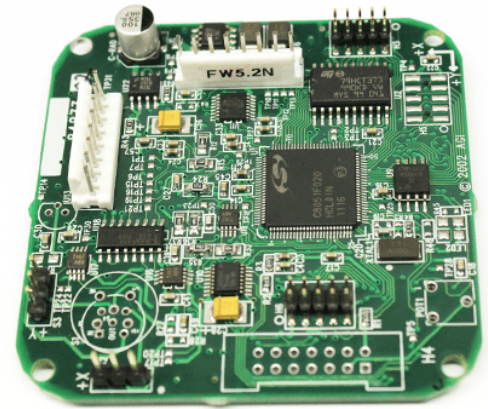
Model IRIS-SC

Digital Signal Conditioning Card

The IRIS-SC digital signal conditioning card is a powerful control device designed for use with all Jewell miniature tilt sensors. Output is ASCII RS232 or RS422(485) serial. Standard firmware includes five user-programmable alarm/trigger thresholds for tilts tilt switch/control applications. When a selected threshold is reached, the circuitry sets the output high on one of the pins in the H3 control connector. Other firmware features include user programmable data output rates, sample averaging, autozero (nulling), and baud rate. The IRIS-SC can also log up to 22,000 samples to internal memory for data dump/download on user command. All IRIS-SC units include calibration when ordered with Jewell miniature tilt sensors (specify calibrated range on order).



Dimensions: in [mm]



PIN OUTS

H1		H2		H3	
1	V+	1	V+	1	-X tilt threshold
2	GND	2	GND	2	+X tilt threshold
3	Tx (RS232)	3	GND	3	-Y tilt threshold
4	Rx (Rs232)	4	-	4	+Y tilt threshold
5	Tx+ (RS422)	5	-	5	Opt. threshold*
6	Tx- (RS422)	6	-	6	Opt. threshold*
7	Rx- (RS422)	7	Analog X-out	7	Opt. threshold*
8	Rx+ (RS422)	8	Analog Y-out	8	Threshold in any direction
				9	GND
				10	3.3 VDC output

PERFORMANCE SPECIFICATIONS

INPUT CHANNELS	Two Tilt Channels (X and Y tilt)
OUTPUT SIGNALS	RS232 and RS422(RS485 Full Duplex) Digital Serial, ASCII
GAIN SETTINGS	Two switchable gains, 10:1 ratio
RESOLUTION	<u>16-bit ADC</u>
SAMPLE RATES	User-selectable from 10/second to 1/hour
TEMPERATURE OUTPUT	On-board Temperature Sensor
DATA STORAGE	512 kB of nonvolatile Flash Memory available* (approx. 22,000 samples)
BAUD RATE	9600 (default), 19200, 28800, 57600, 115200, 230400
DATA FORMAT	NMEA XDR, Trimble TCM, Ashtech, Simple (X, Y, temp., S/N)
CONTROL OUTPUTS	8 TTL-compatible CMOS control outputs (0-5 VDC); 20mA source Power per channel (not to exceed 100mA across all 8 channels)
POWER REQUIREMENTS	7-28 VDC @ 27 mA, 250 mV ripple max., reverse polarity and surge protected.
CONNECTIONS	Four 24-in cables included: Two for signal (H1, one for RS232 and another for RS485); Power (H2); Control Output (H3)
ENVIRONMENTAL	-40° to +85°C operating and storage; 90% humidity, noncondensing
MATERIALS	Fiberglass PCB, thru-holed soldered components
DIMENSIONS AND WEIGHT	67 x 67 x 25mm max. (2.6 x 2.6 x 1.0 inches); 31g (1.1 oz)

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

ORDERING CODE

MODEL NO.	DESCRIPTION
83162	Dual Channel Signal Conditioning Card, Square, 2 Gains, 2 Filters, ± 8 VDC Output (Single-ended)

ACCESSORIES

MODEL NO.	DESCRIPTION
84063-01	Extra 24-in Cable Assembly, RS232 , H1 Header to DB9-sub Connector
84063-02	Extra 24-in Cable Assembly, Power (H2)
84088-01	Extra 24-in Cable Assembly, RS422 , H1 Header to DB9-sub Connector
84083-01	24-in Tilt Switch Control Cable (Connects to H3 Terminal), Tinned Ends
00254-02	Transformer, 100-240VAC to 12VDC