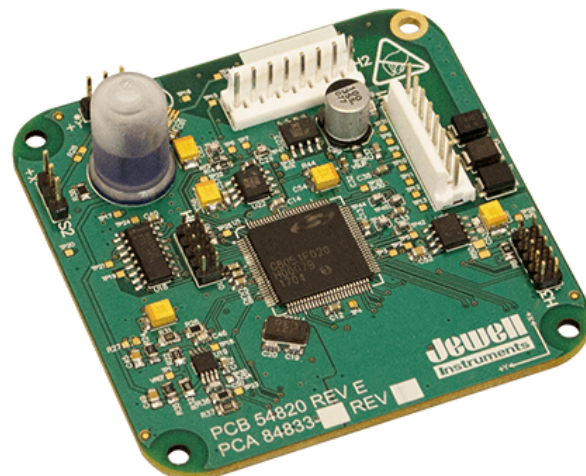
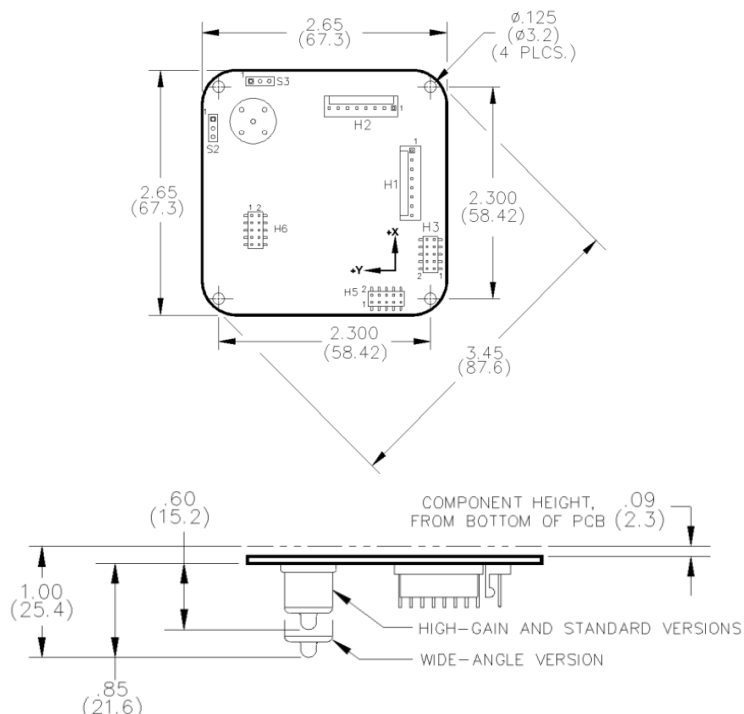


Model MD908 “IRIS”

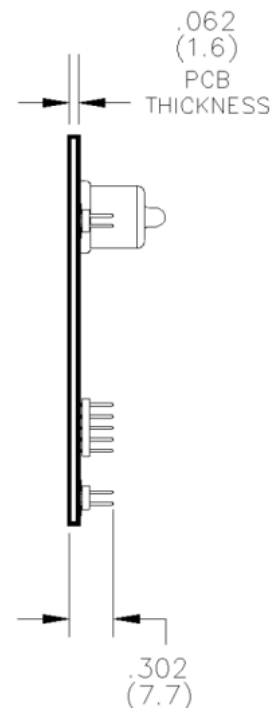
Tilt Switch

The IRIS Tilt Switch and Controller powerful tilt control device with advanced firmware features. The on-board electrolytic tilt sensor is sensitive to $<0.002^\circ$. User programmable settings include AUTOzero (tare), sample averaging, hysteresis control, and more. Units support RS232 and RS422 (RS485 full duplex) output. The IRIS also supports a variety of output protocols including Trimble TCM, NMEA XDR, BAE, and Ashtech Compatible. Units ship standard with 24-in. hook-up cable. Use the IRIS for industrial pitch and roll measurement, platform leveling, specialized OEM assemblies, scientific instrument packages and more.



APPLICATIONS:

- Industrial pitch and roll measurement
- Specialized OEM assemblies
- Platform leveling
- Scientific instrument packages



PERFORMANCE SPECIFICATIONS

PERFORMANCE

VERSION	High-Gain	Standard	Wide-Angle
ANGULAR RANGE (°) ¹	±10°	±25°	±50°
NONLINEARITY (%FRO) ² max	1%		
NONREPEATABILITY	0.01°	0.01°	0.02°
RESOLUTION	0.002°	0.004°	0.01°
TIME CONSTANT	0.15 sec		
Kz TEMP COEFFICIENT	10 arcsec/°C (typical)		
Ks TEMP COEFFICIENT (%/°C)	0.03%/C (typical)		
OUTPUT	RS232, RS422 (RS485 full duplex)		
OUTPUT FORMAT	NMEA XDR, Trimble TCM, BAE, Ashtec compatible, Simple (default: X, Y, Temp., S/N)		
BAUD RATE	9600 (default), 19200, 28800, 57600, 115200, 230400		
CHANNELS	X-tilt, Y-tilt, Temperature, Serial No.		
TILT SWITCH CONTROLS	8 TTL-compatible CMOS control outputs (0-5 VDC); 20mA source Power per channel (not to exceed 100mA across all 8 channels)		

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	2
OUTPUT IMPEDANCE (Ohms, nominal)	270, short circuit protected
NATURAL FREQUENCY	7 Hz
POWER	7-28 VDC @ 30mA, 250 mV ripple max, reverse polarity protected
OPERATING TEMPERATURE RANGE	-40° to +85°C
STORAGE TEMPERATURE RANGE	-40° to +85°C
WEIGHT	31g (1.1 oz)
MATERIALS	Glass electrolytic sensor, fiberglass PCB

NOTES:

1. Custom ranges available on request
2. Nonlinearity is specified as variation around the best straight line from null to full-range output.

Specifications are subject to change without notice due to continued product development

PIN OUT:

H3 PIN	FUNCTION
1	-X TILT THRESHOLD
2	+X TILT THRESHOLD
3	Y TILT THRESHOLD
4	+Y TILT THRESHOLD
5	OPTIONAL THRESHOLD*
6	OPTIONAL THRESHOLD*
7	OPTIONAL THRESHOLD*
8	THRESHOLD IN ANY DIRECTION
9	GROUND
10	3.3 VDC OUTPUT

H2 PIN	FUNCTION
1	V+
2	GND
3	GND
4	-
5	-
6	-
7	ANALOG X OUT
8	ANALOG Y OUT

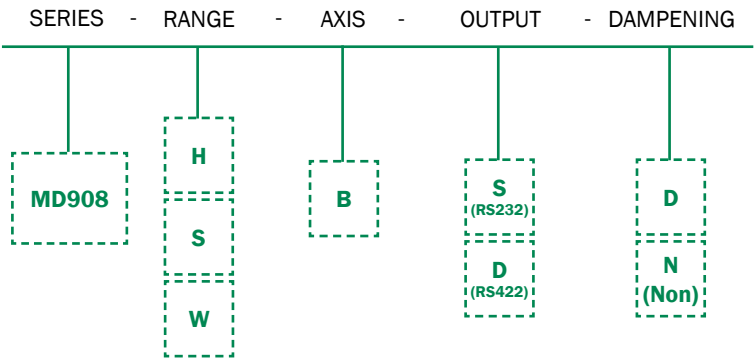
H1 PIN	FUNCTION
1	V+
2	GND
3	TX (RS232)
4	RX (RS232)
5	TX+ (RS422)
6	TX- (RS422)
7	RX- (RS422)
8	RX+ (RS422)



ORDERING INFORMATION

HOW TO ORDER

Model Numbers are comprised of the series, the angular range, number of axes, output interface, and damping.



Accessories:

PART #	DESCRIPTION
84063-01	Extra 24-in Cable Assembly, RS232 , H1
84088-01	Extra 24-in Cable Assembly, RS422 , H1
84083-01	24-in Tilt Switch Control Cable
00254-02	Transformer, 100-240VAC to 12VDC

MODEL #	PART #
MD908-HT-BS-D	98021-06
MD908-HT-BS-N	98021-03
MD908-HT-BD-D	98021-12
MD908-HT-BD-N	98021-09
MD908-ST-BS-D	98021-04
MD908-ST-BS-N	98021-01
MD908-ST-BD-D	98021-10
MD908-ST-BD-N	98021-07
MD908-WT-BS-D	98021-05
MD908-WT-BS-N	98021-02
MD908-WT-BD-D	98021-11
MD908-WT-BD-N	98021-08

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