



SPECIFICATIONS

GENERAL

Data Logging	21k points
Profile Storage	14 profiles
Sampling Rate	5-4800 SPS
Bandwidth (Hz)	Sampling Rate (SPS) / 4
Internal Resolution	24 bits
Resolution (Noise Free)	See Chart on Page 3
Nonlinearity	± 0.005% of FSR
Integrated Digital Filter	50 Hz/60 Hz Rejection (120 dB)
Weight	1.85 lb (840 g)

ENCODER INPUT¹

Supply Voltage	4.75 VDC
Encoder Input	Quadrature Leading and Lagging Pulse (TTL)
Speed Measurement	Up to 150k Pulses Per Second
Angle Measurement (α)	Up to 10k Pulses Per Rotation (PPR)
Angle/Speed Measurement (Update Rate)	100 ms

STRAIN GAUGE mV/V INPUT

Bridge Excitation	Precision 5.000 VDC
Standard Input Range	± 4 mV/V (factory default)
Optional Input Range	Up to ± 500 mV/V
Min. Bridge Resistance	30 Ohm

VOLTAGE INPUT

Supply Voltage	24 V
Standard Input Range	±12 VDC; up to 30 mA

CURRENT INPUT

Supply Voltage	24 V
Standard Input Range	0-30 mA

OUTPUT

Analog Voltage	0-5 or ±5 VDC
Analog Current	0-20, 4-20, 0-25, 5-25 mA
Individual Relay Outputs	2
USB	Digital Packetized Data

CONFORMITY

RoHS	2004/108/EC
CE	EN 61326-1:2006

FEATURES

- Speed/Angle/Power Measurement¹
- Bridge Resistance Measurement
- Keypad Options (Track/Hold, Peak/Valley Reset, Unit, Tare/ Gross, Shunt, Battery, Display, Menu)
- First Peak/First Valley Feature
- User Friendly Navigation Menu
- Shunt Calibration
- Universal Unit Conversion
- Supports IEEE1451.4 Standard (TEDS Templates 30 & 33)
- Leading and Lagging TTL input¹
- USB Output
- ASCII Stream Output
- Selectable Voltage and Current Configuration

LCD

- 16 × 4 character LCD with Selectable Height (0.18 [4.75] and 0.49 [12.55])
- 6 Digit Display Plus Sign and Decimal Point or 7 Digit Plus Sign Depending On Application
- Auto Power-off
- Brightness and Contrast Adjustment

Sensor Solution Source

Load · Torque · Pressure · Multi-Axis · Calibration · Instruments · Software

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RoHS



U.S. Manufacturer

CONNECTORS & WIRING

SENSOR CONNECTIONS

PIN	SYMBOL	DESCRIPTION	DIAGRAM FEMALE INSERT
A	+E	+ Excitation	
B	+S	+ Signal	
C	-E	- Excitation, TEDS return	
D	-S	- Signal	
E	TEDS_IO	TEDS Data	
F	24_OUT	24V Output	
G	GND_OUT	Ground	
H	5_OUT	4.75V Output	
J	-V	-V from Sensor	
K	+V	+V from Sensor	
L	PLEAD	Leading Pulse from Sensor	
M	PLAG	Lagging Pulse from Sensor	
—	SHIELD	Connect to shell. See image on page 3.	

OUTPUT CONNECTIONS

PIN	SYMBOL	DESCRIPTION	DIAGRAM FEMALE INSERT
1	IDAC	Analog Current Output Signal	
2	REFERENCE	Analog Voltage Output Return	
3	+R1	Solid State Relay 1 (Positive)	
4	VDAC	Analog Voltage Output Signal	
5	+R2	Solid State Relay 2 (Positive)	
6	GND	Analog Current Output Return	
7	-R1	Solid State Relay 1 (Negative)	
8	-R2	Solid State Relay 2 (Negative)	
—	SHIELD	Connect to shell. See image on page 3.	

USB PORT CONNECTIONS

PIN	SYMBOL	DIAGRAM FEMALE INSERT
1	VBUS	
2	-D	
3	+D	
4	GND	

POWER CONNECTIONS

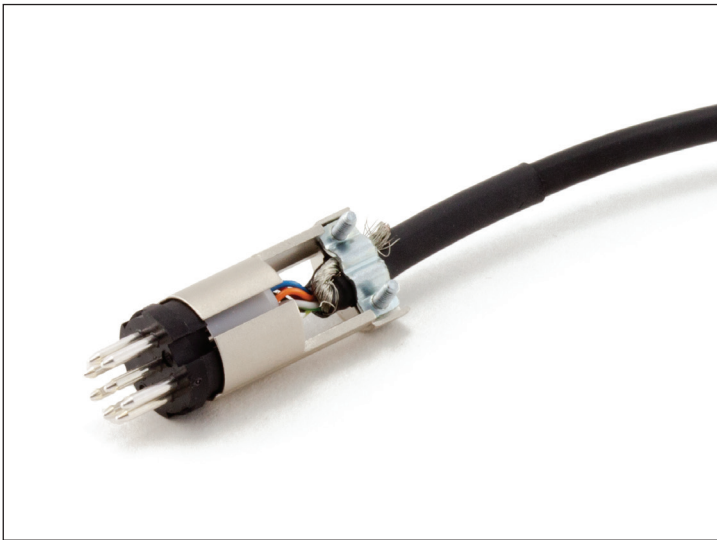
PIN	SYMBOL	DIAGRAM FEMALE INSERT
1	12V	
2	GROUND	

Note: These pins are not polarity sensitive.

CONNECTORS & WIRING

CONNECTORS			
#	TYPE	BINDER	ITEM #
1	POWER CONNECTOR	09 0104 99 02	
	MATING CONNECTOR	99 5101 00 02	FSH03569
2	USB CONNECTOR	09 0112 99 04	
	MATING CONNECTOR ³	99 5109 00 04	FSH03570
3	OUTPUT CONNECTOR	09 0174 99 08	
	MATING CONNECTOR ²	99 5171 00 08	FSH03572
4	SENSOR CONNECTOR	09 0132 90 12	
	MATING CONNECTOR ²	99 5129 00 12	FSH03585

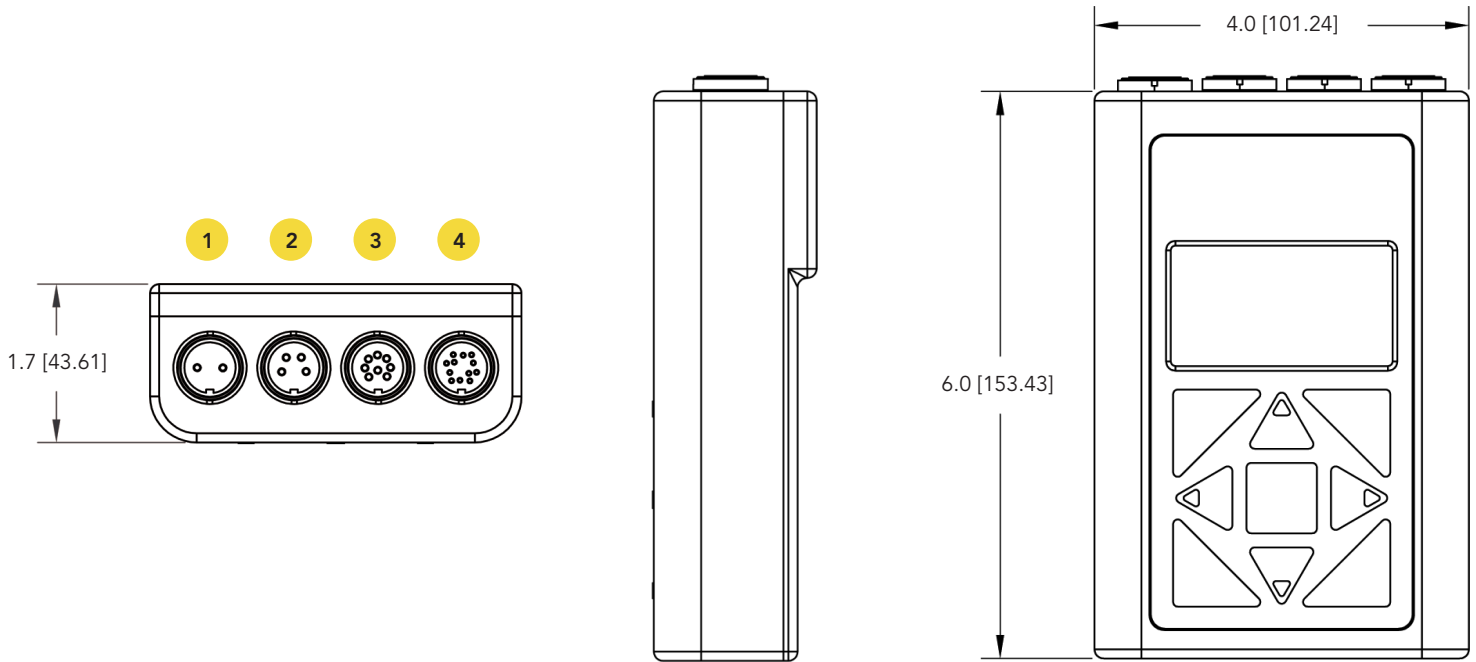
For wiring diagram instructions please [review the product manual](#).



Note: Shield should be connected to cable clamp of binder cable assembly when connecting on instrument side. Sensor cable shield connections should be grounded on one end, either the sensor side or the instrument side, to avoid potential ground loops.

SAMPLING RATE		
SAMPLES PER SECOND (SPS)	mV/V RESOLUTION	mA AND VDC INPUT RESOLUTION
5	18.2	20.5
50	16.8	19.5
100	16.5	19.2
300	16.0	18.2
1200	14.8	17.0
2400	13.9	16.0
4800	13.9	16.0

DIMENSIONS inches [mm]



IHH500 PRO
Intelligent Digital Handheld Display, mV/V, VDC, Current Measurement, Analog Output, Alarm Relays, TEDS and USB Output, Only Power Supply Adapter is Included With Pro Display



IHH500 ELITE
Intelligent Digital Handheld Display, mV/V, VDC, Current and Encoder Measurement, Analog Output, Alarm Relays, TEDS and USB Output — Accessory Kit (FSH03583) With All Mating Connectors and SensIT Software Included

VERSIONS

ITEM #	DESCRIPTION
FSH03460	IHH500 - Elite Display w/ Accessory Kit
FSH03571	IHH500 - Pro Display

RELATED ACCESSORIES

ITEM #	DESCRIPTION
FSH03583	IHH500 - Accessory Kit
FSH03569	IHH500 Power Supply Adaptor
FSH03570	IHH500 USB Cable ²
FSH03189	SENSIT Instrument ²
G0D03025	Bracket ²
FSH03572	IHH500 Analog/Relay Output Cable ³
FSH03585	TEDS Kit

¹ Only available in Elite version

² Included with Elite version

³ Optional

Drawing Number: FI1329-H

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RoHS



U.S. Manufacturer