

MODEL IHH500

Digital Hand Held Display Elite



FEATURES

- Speed/Power Measurement
- 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)
- USB Output
- ASCII Stream Output
- Selectable Voltage and Current Output Configuration

LCD

- 16 x 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

IMPORTANT NOTE: ONLY CONNECT DEVICE TO USB 2.0 PORT

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)
Internal Shunt Resistance Value	150 kOhm
IP Rating	IP64

ENCODER INPUT

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 @ 100 mA max
Standard Input Range	0-30 mA

OUTPUT

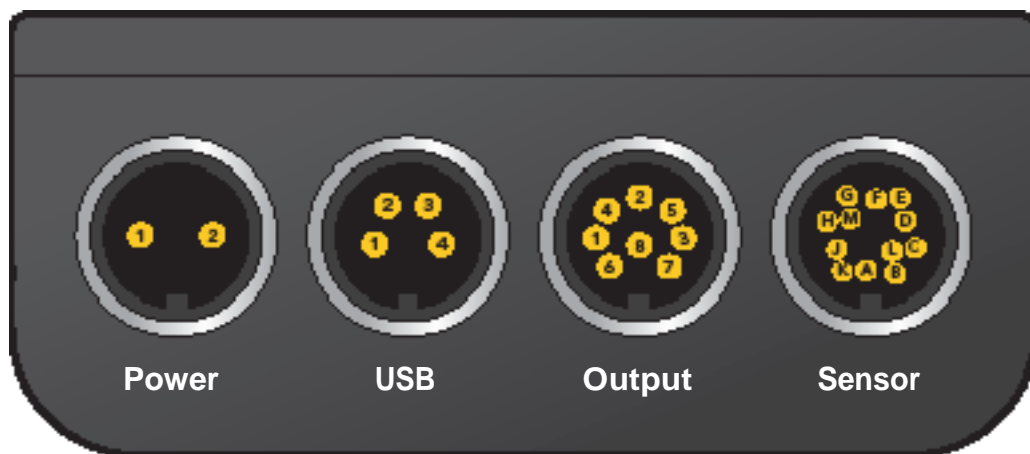
Analog Voltage	0-5 or ±5 VDC*
Minimum Load Impedance (Voltage)	10 kOhm
Analog Current	0-20, 4-20, 0-25, 5-25 mA*
Maximum Load Impedance (Current)	40 Ohm
Individual Relay Outputs	Internally limited to 110 V/100 mA
USB	Digital Packetized Data
ASCII Output Update Rate	5 SPS

*Max analog output bandwidth: SPS/4. Refer to IHH500 User Manual for conditions on analog output bandwidth



MODEL IHH500

Digital Hand Held Display Elite



POWER CONNECTIONS

PIN	SYMBOL
1	12V
2	Ground

Note: These pins are not polarity sensitive.

USB PORT CONNECTIONS (COMPATIBLE WITH USB 2.0 ONLY)

PIN	SYMBOL
1	VBUS
2	-D
3	+D
4	GND

OUTPUT CONNECTIONS

PIN	SYMBOL	DESCRIPTION
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)

SENSOR CONNECTIONS

PIN	SYMBOL	DESCRIPTION
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/Shield
H	5_OUT	5V Output
J	-V	-V and -mA Amplified Input Connections
K	+V	+V and +mA Amplified Input Connections
L	PLEAD	Leading pulse from sensor (Elite Version Only)
M	PLAG	Lagging pulse from sensor (Elite Version Only)

Note: Cable should be connected to pin G, ground, and should be grounded on one end, either the sensor side or the IHH500 connection side.



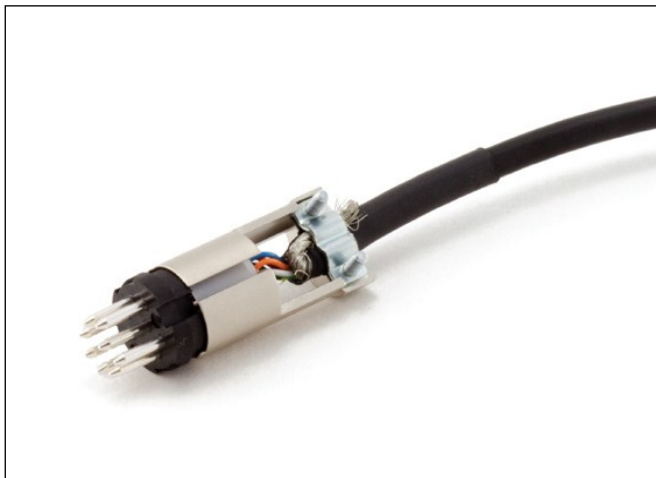
MODEL IHH500

Digital Hand Held Display Elite



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	GOD02974
4	SENSOR CONNECTOR	09 0132 90 12	
	MATING CONNECTOR ²	99 5129 00 12	GOD02975

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

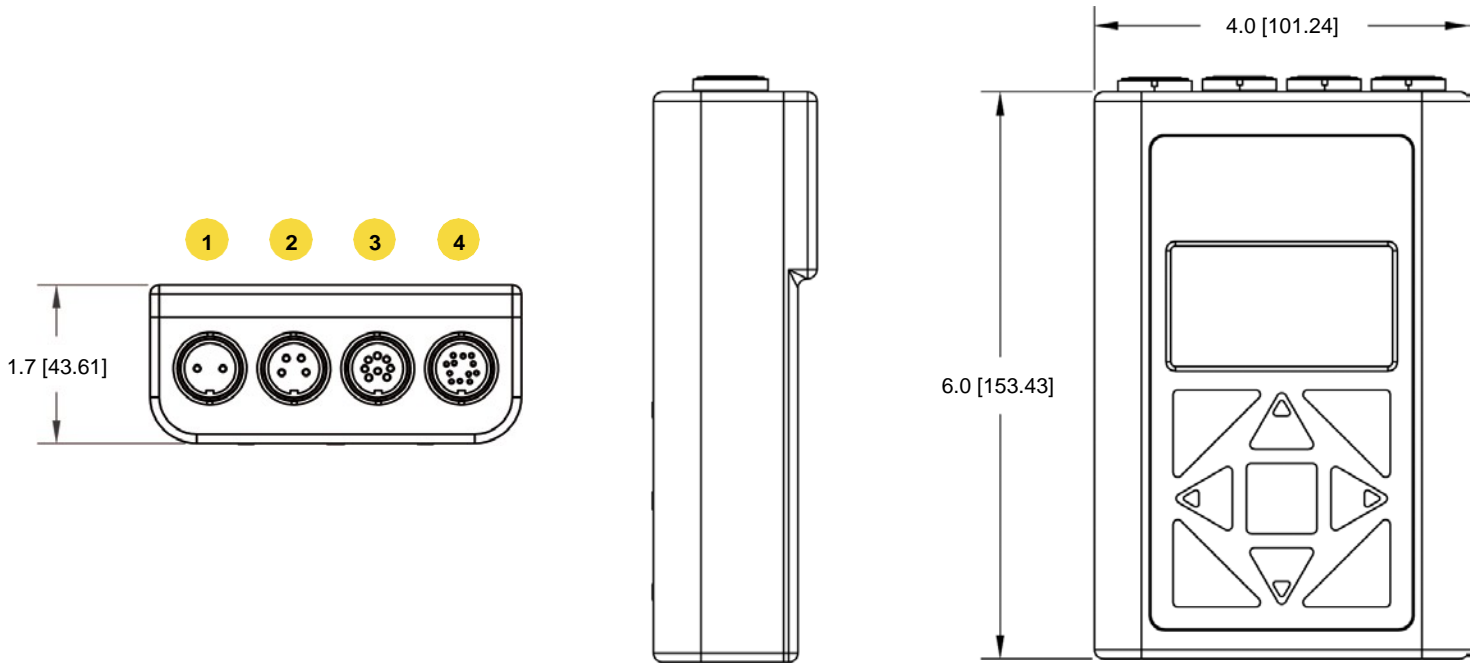


Note: Shield should be connected to cable clamp of binder cable assembly when connecting on instrument side. Sensor cable shield connections should be grounded on one end, either the sensor side or the instrument side, to avoid potential ground loops.

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]



INCLUDED ACCESSORIES

ITEM #	DESCRIPTION
FSH03569	IHH500 Power Supply Adaptor
FSH03189	SENSIT Software
FSH03720	Bracket and 3x Screws
FSH03570	IHH500 USB Cable
FSH03572	IHH500 Analog/Relay Output Cable
GOD02975	Binder Male Plug with Cable Clamp
GOD03246	Pelican Case