

# FUTEK MODEL IHH500

# Intelligent Digital Handheld Display

Drawing Number: FI1329-A

INCH [mm]



### PERFORMANCE:

- 24 bits Internal Resolution
- Up to 20 bits ( $\pm 500,000$  counts) Noise Free Resolution
- 5 to 4800 Sample per Second Selectable Rate
- High Accuracy ( $\pm 0.001\%$ )
- Low Non-linearity ( $\pm 0.001\%$ )
- Minimum Bridge Resistance: 30 ohm

### INPUT:

- Input Range up to  $\pm 500\text{mV/V}$  (Strain Gauge)
- Input Range  $\pm 12\text{VDC}$  (Amplified Input)
- Input Range up to 30 mA (Amplified Input)
- Leading and Lagging TTL input\*

### OUTPUT:

- USB Output
- ASCII Stream
- Precision 5.000V Excitation
- 24V/ 5V Supply
- Analog Voltage (0-5 or  $\pm 5$  VDC)
- Analog Current (0-20, 4-20, 0-25, 5-25 mA)
- Selectable Voltage and Current Configuration
- Two Individual Relay Outputs

### FEATURES:

- 21k Point Data Logging
- Speed/ Angle/ 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
- 14 Sensor Profile Storage
- Supports IEEE145.4 Standard (TEDS 30 & 33)

### 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
- LCD Auto Power-off
- Brightness/ Contrast Adjustment

### BATTERY:

- Rechargeable Battery Operated
- Battery Life up to 30 Hours (Depending on the Load)
- Battery Lifetime Monitoring

### BATTERY CHARGER:

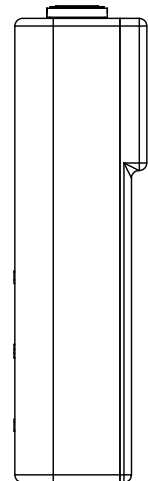
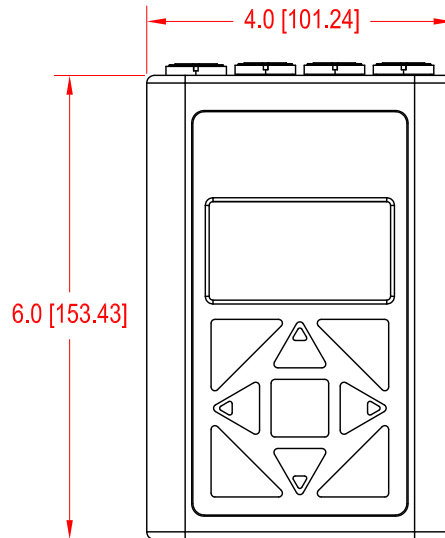
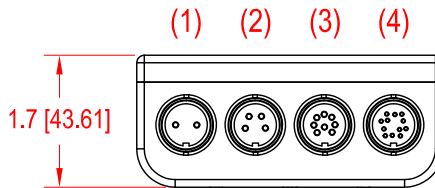
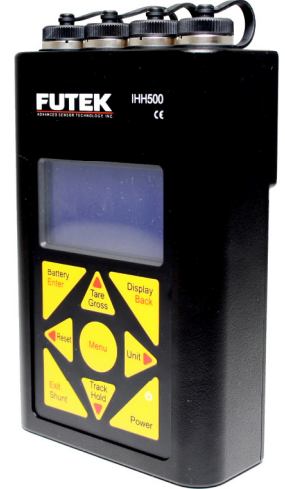
- Input: 100-240 VAC - 0.5 A 50/60 Hz
- Output: 12 VDC - 1.2 A

### WEIGHT:

- 1.85 lb (840 g)

### CONNECTORS:

- (1) Power Connector: Binder 09 0104 99 02  
Mating Connector: Binder 99 5101 00 02
- (2) USB Connector: Binder 09 0112 99 04  
Mating Connector: Binder 99 5109 00 04\*\*\*
- (3) Output Connector: Binder 09 0174 99 08  
Mating Connector: Binder 99 5171 00 08\*\*
- (4) Sensor Connector: Binder 09 0132 90 12  
Mating Connector: Binder 99 5129 00 12\*\*



### ENVIRONMENT:

- Operating Temperature:  $-4^{\circ}\text{F}$  ( $-20^{\circ}\text{C}$ ) to  $158^{\circ}\text{F}$  ( $70^{\circ}\text{C}$ )
- Storage Temperature:  $-22^{\circ}\text{F}$  ( $-30^{\circ}\text{C}$ ) to  $176^{\circ}\text{F}$  ( $80^{\circ}\text{C}$ )

### ITEM #'S:

- FSH03460: IHH500 - Elite Display w/ Accessory Kit
- FSH03571: IHH500 - Pro Display
- FSH03583: IHH500 - Accessory Kit
- FSH03569: IHH500 Power Supply Adaptor
- FSH03570: IHH500 USB Cable\*\*
- FSH03189: SensIT Instrument\*\*
- GOD03025: Bracket\*\*
- FSH03572: IHH500 Analog/Relay Output Cable\*\*

\*Only available in Elite version    \*\*Included with Elite version    \*\*\*Optional



This drawing is submitted solely for the information and exclusive use of the original addressee. It is not to be divulged in whole or in part, by any firm or individual without written permission from FUTEK

CAGE CODE # 1X8M6

10 THOMAS  
IRVINE, CA 92618 USA  
1-800-23-FUTEK (38835)

INTERNET:  
<http://www.futek.com>

# FUTEK MODEL LCF500

# LOW PROFILE UNIVERSAL PANCAKE LOAD CELL

**Drawing Number: FI1012-B**

**INCH [mm] R.O.= Rated Output**

WIRING CODE (CC1/CC1T)

+Excitation	-Excitation	+Signal	-Signal
RED PIN 'A'	BLACK PIN 'B'	GREEN PIN 'C'	WHITE PIN 'D'

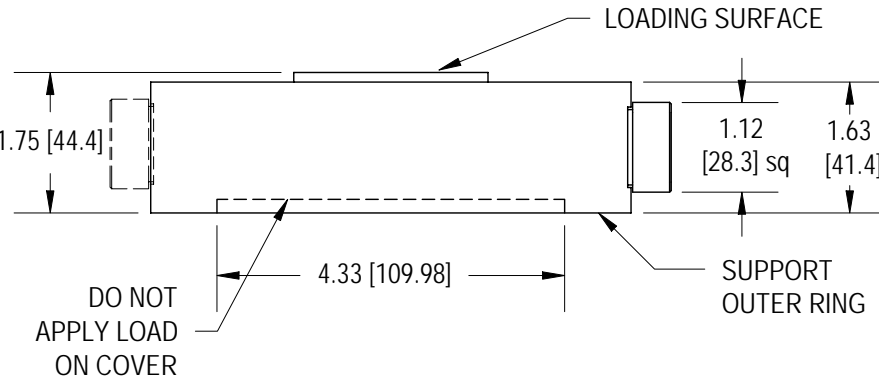
+Sense/ TEDS Data*	-Sense / TEDS Gnd*
ORANGE PIN 'E'	BLUE PIN 'F'

\*TEDS VERSIONS ONLY

12 X Ø0.406 [Ø10.3] THRU EQUALLY SPACED ON 5.125 [130.2] B.C.D.

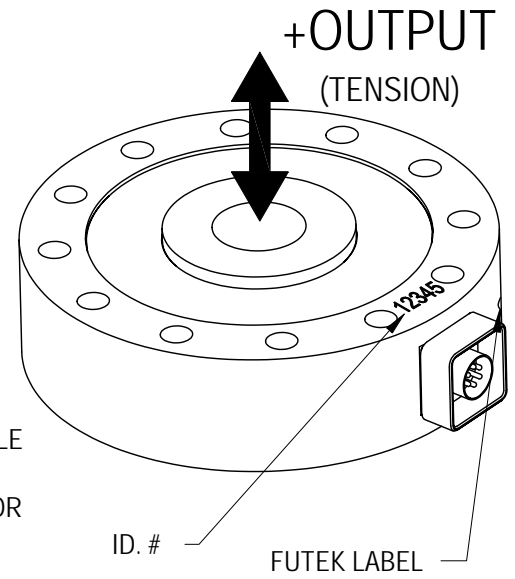
DUAL BRIDGE OPTION

NON LOADING SURFACE DO NOT CONTACT



## SPECIFICATIONS:

<b>RATED OUTPUT</b>	4 mV/V nom.
<b>SAFE OVERLOAD</b>	150% of R.O.
<b>ZERO BALANCE</b>	±1% of R.O.
<b>EXCITATION (VDC OR VAC)</b>	20 MAX
<b>BRIDGE RESISTANCE</b>	350 Ω nom
<b>NONLINEARITY</b>	±0.1% of R.O.
<b>HYSTERESIS</b>	±0.2% of R.O.
<b>NONREPEATABILITY</b>	±0.02% of R.O.
<b>CREEP</b>	±0.02% of LOAD
<b>TEMP. SHIFT ZERO</b>	±0.001% of R.O./°F [0.0018% of R.O./°C]
<b>TEMP. SHIFT SPAN</b>	±0.002% of LOAD/°F [0.0036% of LOAD/°C]
<b>COMPENSATED TEMP.</b>	60 to 160°F [15 to 72°C]
<b>OPERATING TEMP.</b>	-60 to 200°F [-50 to 93°C]
<b>MATERIAL</b>	17-4PH S.S.
<b>WEIGHT</b>	9 lb [4.1 kg]
<b>DEFLECTION</b>	0.002 to 0.005 [0.05 to 0.13] nom.
<b>CONNECTOR: 6 Pin BENDIX Receptacle (PT02A-10-6P)</b>	
<b>ACCESSORIES AND RELATED INSTRUMENTS AVAILABLE</b>	
<b>CALIBRATION (STD)</b>	5 pt. COMPRESSION; 30 KΩ SHUNT CAL. VALUE
<b>CALIBRATION TEST EXCITATION</b>	10 VDC



BENDIX RECEPTACLE PT02A-10-6P MATING CONNECTOR PT06A-10-6S-SR (NOT INCLUDED)

REMOVABLE CONNECTOR GUARD

THREAD THRU

LOADING SURFACE

SUPPORT OUTER RING

Stock #	CAPACITY		THREAD	TEDS	DUAL BRIDGE
	Klb	kN			
FSH02669	25	111	1 1/4 -12		
FSH02687				X	
FSH03010					X
FSH03014			X	X	
FSH02897			M33 X 2		
FSH02935				X	
FSH03000		X			
FSH03012		X	X		
FSH02642	50	222	1 1/4 -12		
FSH02689				X	
FSH03009					X
FSH03013			X	X	
FSH02898			M33 X 2		
FSH02968				X	
FSH02999		X			
FSH03011		X	X		

REFER TO LCF505 FOR TENSION BASE VERSION