

FUTEK's IPM650 Panel Mount Display is an a multi-purpose display compatible with strain gauge and amplified sensors.

NOTABLE FEATURES

- 21K Point Data Logging
- Bridge resistance measurement
- Keypad options (Track/Hold - Peak/Valley Reset - Unit - Tare/Gross-Shunt - Channel - Display-Menu)
- First peak/First valley feature
- User friendly navigation menu
- Shunt Calibration
- Universal Unit Conversion
- 14 Sensor Profile Storage
- Supports 1451.4 standard (TEDS template 30 and 33)

WEIGHT

- 1.9lb (862 g)

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)

OUTPUT

- USB Output
- ASCII Stream
- Precision 5.000V Excitation
- 24 VDC/5 VDC Supply
- Analog Voltage (0-5 or ± 5 VDC)
- Analog Current (0-20, 4-20, 0-25, 5-25 mA)
- Selectable Voltage and Current Configuration
- Two Individual Relay Outputs (110 VAC - 100 mA)
- Offers selectable Bi-polar current outputs



The IPM650 Intelligent Panel Meter is FUTEK's solution that can be easily integrated to work with Load Cells, Torque Sensors and Pressure Sensors. The IPM650 has an input range of up to $\pm 500\text{ mV/V}$. Beside the mV/V input, the IPM650 accepts amplified output sensors in the range of $\pm 12\text{ VDC}$ or up to 30 mA. It also has two individual relays and Analog voltage and Analog current output. This device provides an additional 24 VDC / 5VDC as a power supply for sensors with a built-in amplifier. FUTEK's Panel Meter also supports TEDS which makes it easy to switch between different sensors. A high speed/ low noise/ high resolution (24 bits) ADC is integrated in the device to make it suitable for high accuracy measurements. This particular Panel Meter also has the capability of interacting with a computer through the USB link, and can be used with the FUTEK SENSIT software.



Sensor Solution Source

Load • Torque • Pressure • Multi Axis • Calibration • Instruments • Software

www.futek.com



9001:2008



13485:2004



17025:2005



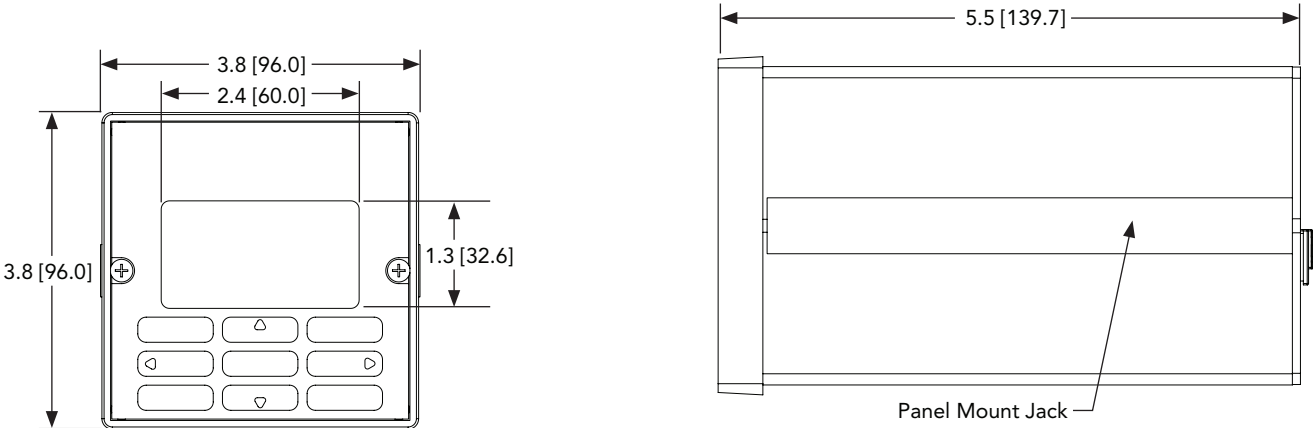
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RoHS



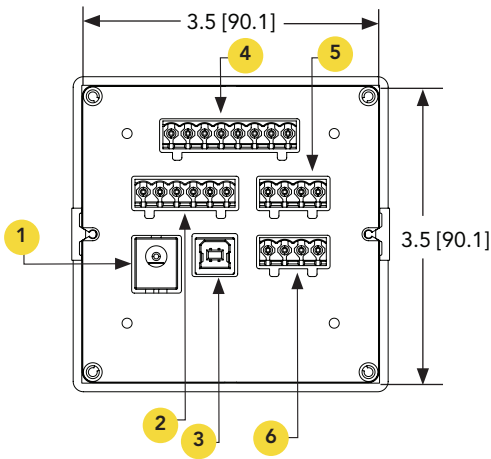
U.S. Manufacturer

DIMENSIONS inches [mm]

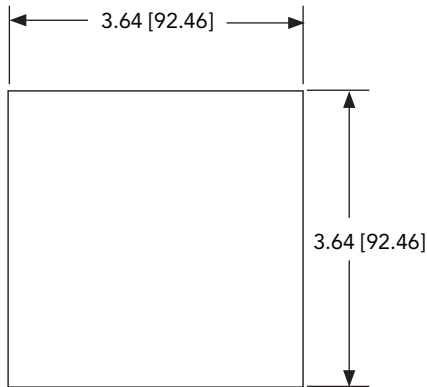


CONNECTORS

1	Input Power: 15 VDC \pm 0.75 V @ 1.2 A
2	Strain Gauge Input
3	USB Type B Socket
4	Amplified Input
5	Relays
6	Analog Output



RECOMMENDED PANEL CUTOUT



PERFORMANCE			
PARAMETER	MIN	MAX	UNIT
Resolution		24	Bits
Noise Free Resolution		20	Bits
	-500,000	500,000	Counts
Selectable Rate	5	4800	Samples/second
High Accuracy (Better than)	-.01	.01	% of FSR
Bridge Resistance	30	30,000	ohm
Compatible with SENSIT Version (or Higher)	2.2.4000.0		
21K Data Logging Points Available			

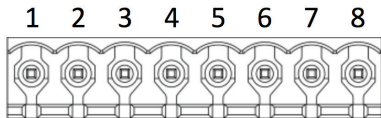
INPUT			
PARAMETER	MIN	MAX	UNIT
Input Range 1	-500	500	mV/V nom.
Input Range 2	-12	12	Vdc
Input Range 3	0	30	mA

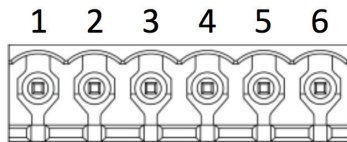
OUTPUT			
PARAMETER	MIN	MAX	UNIT
Analog Voltage	0	5	Vdc
	-5	5	Vdc
Analog Current	0	20	mA
	4	20	mA
	0	25	mA
	5	25	mA

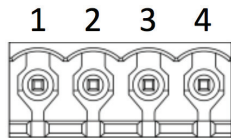
ENVIRONMENT			
PARAMETER	MIN	MAX	UNIT
Operating Temperature ⁶	-4	158	°F
	-20	70	°C
Storage Temperature	-22	176	°F
	-30	80	°C

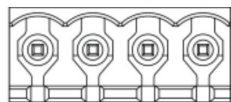
POWER ADAPTER	
PARAMETER	
Input	90- 264 VAC
Frequency	47-63 Hz
Input Current	0.35 A rms @ 120Vac; 0.25 A @ 240 Vac
Output	15 VDC @ 1.2 A

CONNECTORS & WIRING DIAGRAM

AMPLIFIED INPUT			
PIN	SYMBOL	DESCRIPTION	DIAGRAM
1	G	Ground	
2	G	Ground	
3	24V OUT	24VDC Output	
4	5V OUT	5VDC Output	
5	-V	- Amplified Input	
6	+V	+ Amplified Input	
7	PLEAD	N/A	
8	PLAG	N/A	

STRAIN GAUGE INPUT			
PIN	SYMBOL	DESCRIPTION	DIAGRAM
1	G	Ground	
2	TEDS	TEDS Data	
3	-S	-Signal	
4	+S	+Signal	
5	-E	-Excitation	
6	+E	+Excitation	

RELAYS			
PIN	SYMBOL	DESCRIPTION	DIAGRAM
1	-R2	Solid State Relay 2	
2	+R2	Solid State Relay 2	
3	-R1	Solid State Relay 1	
4	+R1	Solid State Relay 1	

ANALOG OUTPUT			
PIN	SYMBOL	DESCRIPTION	DIAGRAM
1	-VOUT	Voltage Output (-)	
2	+VOUT	Voltage Output (+)	
3	G	Ground (Current)	
4	IOUT	Current Output	

RELATED ACCESSORIES

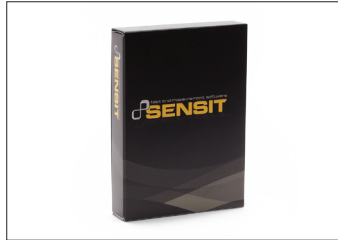
The following accessories are readily available with our IPM650 Intelligent Panel Meter. Please visit www.futek.com for full details on these items.



USB CABLE

Item Number: GOD03196

USB 2.0, A-B Male, Black,
2m Long



SENSIT™ TEST AND MEASUREMENT

Item Number: FSH03189

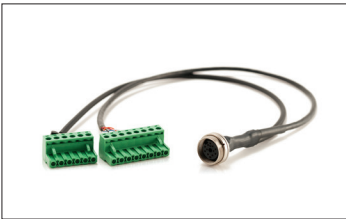
Version 2.3.4003.3 for IHH500,
IPM650, USBxxx. Compatible w/
Windows XP, Vista, 7 & 8



IPM650 REAR STAND

Item Number: FSH03717

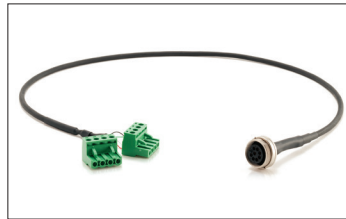
w/ Slip Protection Bumpers , Black
Anodized



ZCC994 CABLE ASSEMBLY

Item Number: FSH03669

Sensor Panel Mount Cable
Assembly, also Supports Sensors w/
TEDS Kits, for IPM650



ZCC995 CABLE ASSEMBLY

Item Number: FSH03670

ZCC995, Analog Output/Relay/
Alarm Cable Assembly for IPM650

TECHNICAL SUPPORT

To access the IPM650 manual and gain setting instructions, visit our support page for detailed instructions: <http://www.futek.com/ipm650/support>

Drawing Number: FI1340-H

FUTEK reserves the right to modify its design and specifications without notice.
Please visit <http://www.futek.com/salesterms> for complete terms and conditions.

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