

Quartz Flexible Accelerometer

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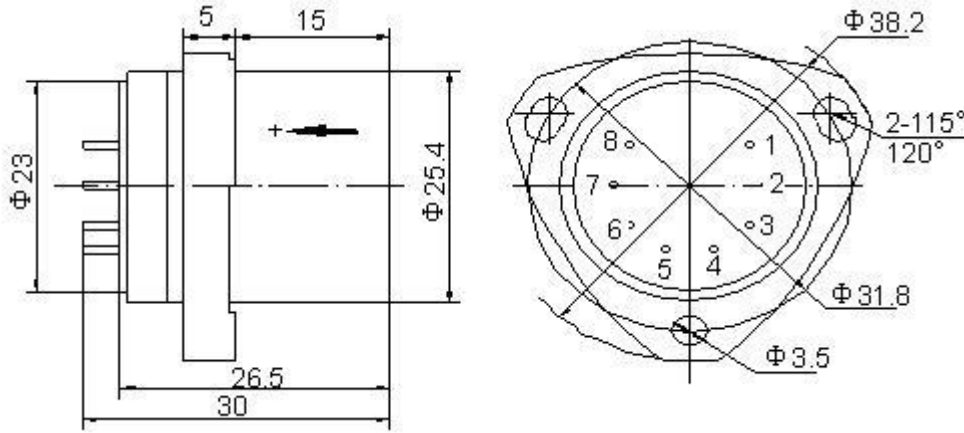
Product Model: HTS-A

Application: Can be used in the vector's micro-gravity measurement system and high precision inertial navigation system, and also can be used in the high precision static angle measurement system.



Product Specification	Model: HTS-A		
	03	02	01
Measurement Range	≥±20g	≥±20g	≥±20g
Bias	≤±1mg	≤±3mg	≤±3mg
Bias Temp Coefficient	≤±10 µg/°C	≤±10 µg/°C	≤±15 µg/°C
Bias Repeatability	≤10 µg (one month)	≤20 µg (one month)	≤30 µg (one month)
Scale Factor	1.1~1.5 mA/g	1.1~1.5 mA/g	1.1~1.5 mA/g
Scale Factor Temp Coefficient	≤±10 ppm/°C	≤±20 ppm/°C	≤±30 ppm/°C
Scale Factor Repeatability	≤10 ppm (one month)	≤20 ppm (one month)	≤30 ppm (one month)
Second-order Nonlinearity	≤±10 µg/g ²	≤±10 µg/g ²	≤±15 µg/g ²
Second-order Nonlinearity Repeatability	≤10 µg/g ² (one month)	≤10 µg/g ² (one month)	≤10 µg/g ² (one month)
Threshold	≤5×10 ⁻⁶ g	≤5×10 ⁻⁶ g	≤5×10 ⁻⁶ g
Nature Frequency	≤800Hz	≤800Hz	≤800Hz
Operating Voltage	±12~±15 V	±12~±15 V	±12~±15 V
Operation Temperature	-45~+80 °C	-45~+80 °C	-45~+80 °C
Shock	120g,4.5ms,1/2sin	120g,4.5ms,1/2sin	120g,4.5ms,1/2sin
Vibration	8 grms	8 grms	8 grms
Dimension	Φ25.4*30 mm	Φ25.4*30 mm	Φ25.4*30 mm
Weight	≤80g	≤80g	≤80g

Dimension drawing



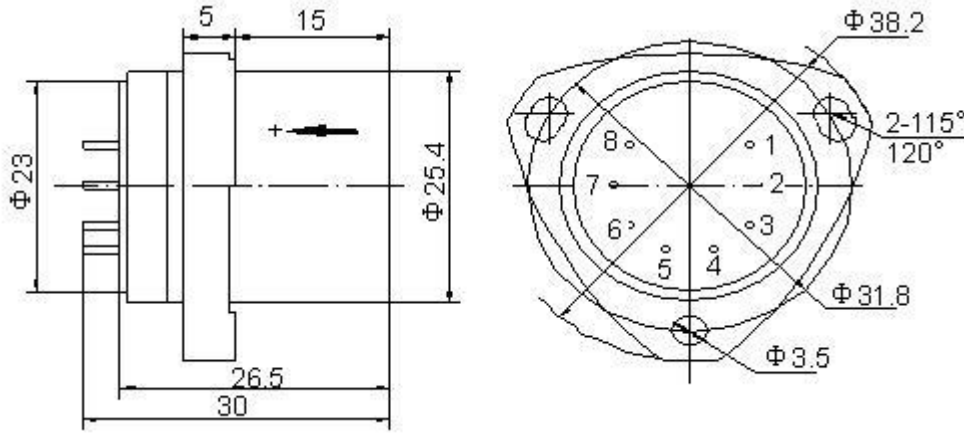
Product Model: HTS-B

Application: Available in inertial navigation system, it has a wide application in inertial navigation system and control system of the aerospace vehicles and ships.



Product Specification	Model: HTS-B	
	02	01
Measurement Range	$\geq \pm 20g$	$\geq \pm 20g$
Bias	$\leq \pm 3mg$	$\leq \pm 3mg$
Bias Temp Coefficient	$\leq \pm 30 \mu g/^{\circ}C$	$\leq \pm 40 \mu g/^{\circ}C$
Bias Repeatability	$\leq 30 \mu g$ (one month)	$\leq 30 \mu g$ (one month)
Scale Factor	1.1~1.5 mA/g	1.1~1.5 mA/g
Scale Factor Temp Coefficient	$\leq \pm 50 ppm/^{\circ}C$	$\leq \pm 60 ppm/^{\circ}C$
Scale Factor Repeatability	$\leq 30 ppm$ (one month)	$\leq 30 ppm$ (one month)
Second-order Nonlinearity	$\leq \pm 20 \mu g/g^2$	$\leq \pm 30 \mu g/g^2$
Second-order Nonlinearity Repeatability	$\leq 10 \mu g/g^2$ (one month)	$\leq 10 \mu g/g^2$ (one month)
Threshold	$\leq 5 \times 10^{-6} g$	$\leq 5 \times 10^{-6} g$
Nature Frequency	$\leq 800Hz$	$\leq 800Hz$
Operating Voltage	$\pm 12 \sim \pm 15 V$	$\pm 12 \sim \pm 15 V$
Operation Temperature	$-45 \sim +80 ^{\circ}C$	$-45 \sim +80 ^{\circ}C$
Shock	120g, 4.5ms, 1/2sin	120g, 4.5ms, 1/2sin
Vibration	8 grms	8 grms
Dimension	$\Phi 25.4 * 30 mm$	$\Phi 25.4 * 30 mm$
Weight	$\leq 80g$	$\leq 80g$

Dimension drawing



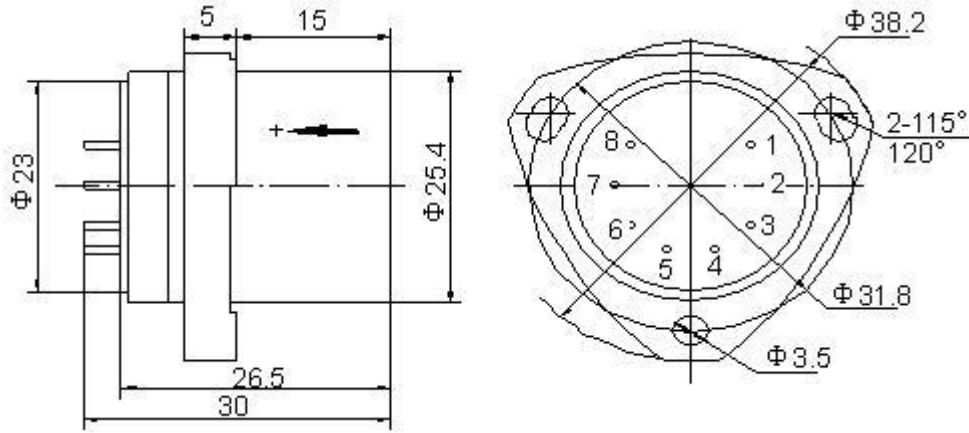
Product Model: HTS-C

Application: Can be used in navigation system for tanks, military vehicles etc.



Product Specification	Model: HTS-C	
	02	01
Measurement Range	≥±20g	≥±20g
Bias	≤±4mg	≤±4mg
Bias Temp Coefficient	≤±40 µg/°C	≤±50 µg/°C
Bias Repeatability	≤40 µg (one month)	≤40 µg (one month)
Scale Factor	1.1~1.5 mA/g	1.1~1.5 mA/g
Scale Factor Temp Coefficient	≤±60 ppm/°C	≤±80 ppm/°C
Scale Factor Repeatability	≤40 ppm (one month)	≤40 ppm (one month)
Second-order Nonlinearity	≤±30 µg/g ²	≤±50 µg/g ²
Second-order Nonlinearity Repeatability	≤20 µg/g ² (one month)	≤20 µg/g ² (one month)
Threshold	≤5×10 ⁻⁶ g	≤5×10 ⁻⁶ g
Nature Frequency	≤800Hz	≤800Hz
Operating Voltage	±12~±15 V	±12~±15 V
Operation Temperature	-45~+80 °C	-45~+80 °C
Shock	120g,4.5ms,1/2sin	120g,4.5ms,1/2sin
Vibration	8 grms	8 grms
Dimension	Φ25.4*30 mm	Φ25.4*30 mm
Weight	≤80g	≤80g

Dimension drawing



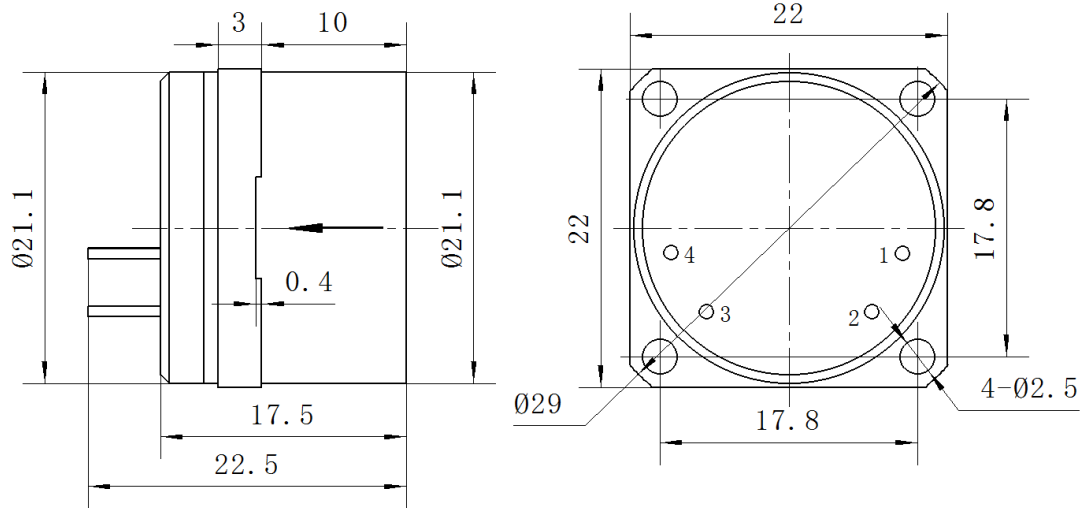
Product Model: HTS-E

Application: Used in the acceleration measurement system of the moving object with space limitation.



Product Specification	Model: HTS-E		
	03	02	01
Measurement Range	≥±20g	≥±20g	≥±20g
Bias	≤±6mg	≤±6mg	≤±6mg
Bias Temp Coefficient	≤±30 µg/°C	≤±40 µg/°C	≤±50 µg/°C
Bias Repeatability	≤50 µg (one month)	≤50 µg (3~7 days)	≤50 µg (1 day)
Scale Factor	1.0~1.4 mA/g	1.0~1.4 mA/g	1.0~1.4 mA/g
Scale Factor Temp Coefficient	≤±60 ppm/°C	≤±70 ppm/°C	≤±80 ppm/°C
Scale Factor Repeatability	≤50 ppm (one month)	≤50 ppm (3~7 days)	≤50 ppm (1 day)
Second-order Nonlinearity	≤±30 µg/g ²	≤±40 µg/g ²	≤±50 µg/g ²
Second-order Nonlinearity Repeatability	≤30 µg/g ² (one month)	≤30 µg/g ² (3~7 days)	≤30 µg/g ² (1 day)
Threshold	≤5×10 ⁻⁵ g	≤5×10 ⁻⁵ g	≤5×10 ⁻⁵ g
Nature Frequency	≤800Hz	≤800Hz	≤800Hz
Operating Voltage	±7~±12 V	±7~±12 V	±7~±12 V
Operation Temperature	-45~+80 °C	-45~+80 °C	-45~+80 °C
Shock	120g,4.5ms,1/2sin	120g,4.5ms,1/2sin	120g,4.5ms,1/2sin
Vibration	8 grms	8 grms	8 grms
Dimension	Φ21.1*22.5 mm	Φ21.1*22.5 mm	Φ21.1*22.5 mm
Weight	≤40g	≤40g	≤40g

Dimension drawing



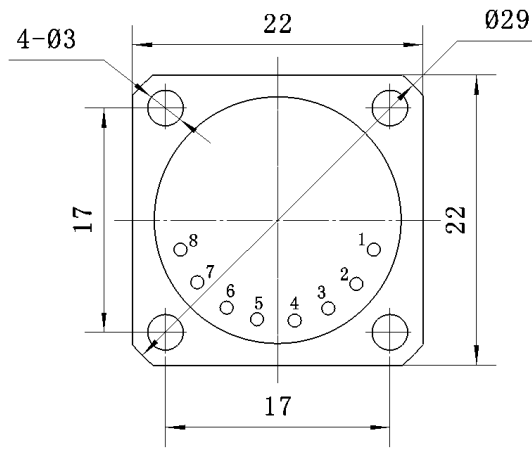
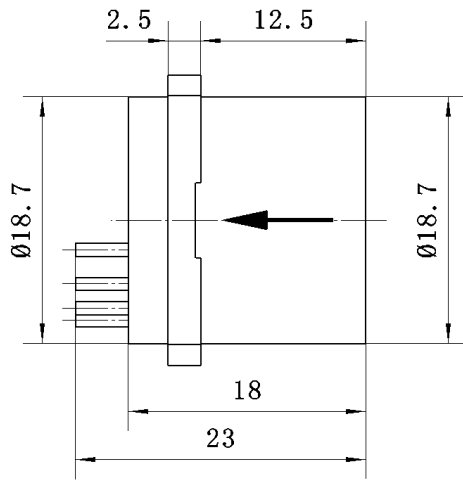
Product Model: HTS-F

Application: Used in small size inertial navigation system



Product Specification	Model: HTS-F	
	02	01
Measurement Range	≥±20g	≥±20g
Bias	≤±3mg	≤±6mg
Bias Temp Coefficient	≤±30 µg/°C	≤±50 µg/°C
Bias Repeatability	≤30 µg (one month)	≤50 µg (one week)
Scale Factor	0.8~1.2 mA/g	0.8~1.2 mA/g
Scale Factor Temp Coefficient	≤±30 ppm/°C	≤±80 ppm/°C
Scale Factor Repeatability	≤30 ppm (one month)	≤50 ppm (one week)
Second-order Nonlinearity	≤±20 µg/g ²	≤±50 µg/g ²
Second-order Nonlinearity Repeatability	≤10 µg/g ² (one month)	≤20 µg/g ² (one week)
Threshold	≤5×10 ⁻⁵ g	≤5×10 ⁻⁵ g
Nature Frequency	≤800Hz	≤800Hz
Operating Voltage	±12~±15 V	±12~±15 V
Operation Temperature	-45~+80 °C	-45~+80 °C
Shock	120g,4.5ms,1/2sin	120g,4.5ms,1/2sin
Vibration	8 grms	8 grms
Dimension	Φ18.7*23 mm	Φ18.7*23 mm
Weight	≤30g	≤30g

Dimension drawing



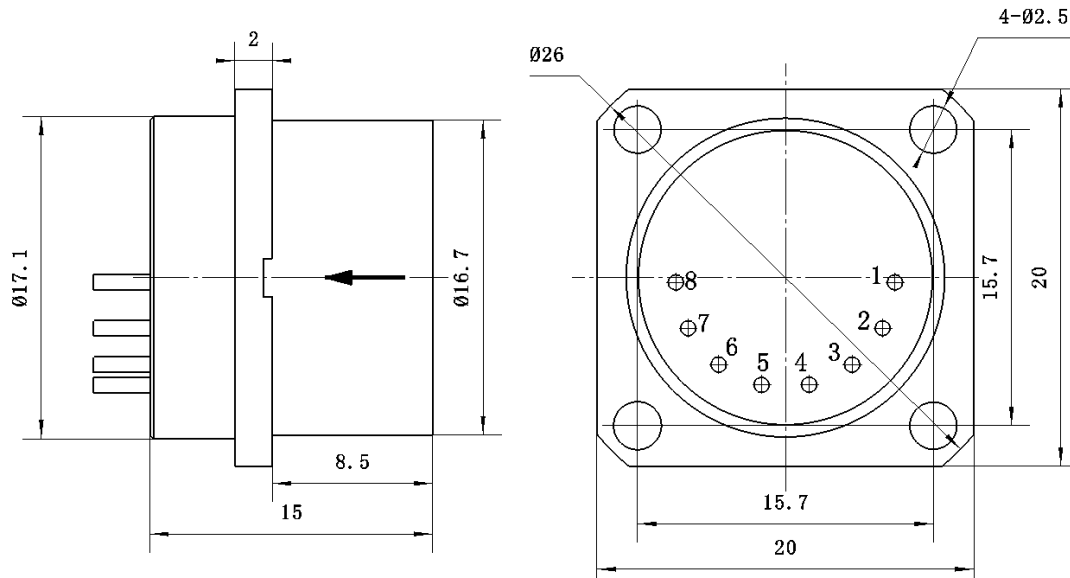
Product Model: HTS-G

Application: Used in small size inertial navigation system



Product Specification	Model: HTS-G	
	02	01
Measurement Range	≥±20g	≥±20g
Bias	≤±5mg	≤±10mg
Bias Temp Coefficient	≤±40 µg/°C	≤±60 µg/°C
Bias Repeatability	≤50 µg (one month)	≤100 µg (one week)
Scale Factor	1.8~1.2 mA/g	1.8~1.2 mA/g
Scale Factor Temp Coefficient	≤±80 ppm/°C	≤±120 ppm/°C
Scale Factor Repeatability	≤50 ppm (one month)	≤100 ppm (one week)
Second-order Nonlinearity	≤±15 µg/g ²	≤±30 µg/g ²
Second-order Nonlinearity Repeatability	≤20 µg/g ² (one month)	≤30 µg/g ² (one week)
Threshold	≤5×10 ⁻⁵ g	≤5×10 ⁻⁵ g
Nature Frequency	≤800Hz	≤800Hz
Operating Voltage	±12~±15 V	±12~±15 V
Operation Temperature	-45~+80 °C	-45~+80 °C
Shock	120g,4.5ms,1/2sin	120g,4.5ms,1/2sin
Vibration	8 grms	8 grms
Dimension	Φ16.7*15 mm	Φ16.7*15 mm
Weight	≤80g	≤80g

Dimension drawing



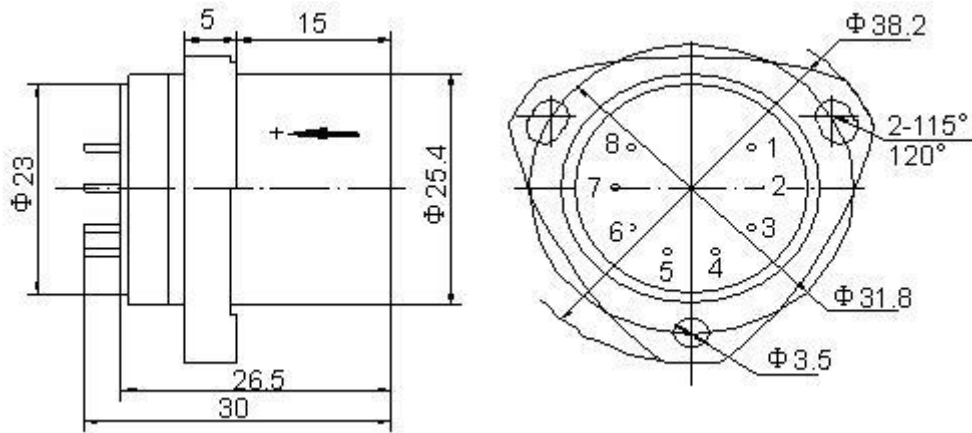
Product Model: HTS-AI

Application: Used in the situation with high requirements for environment and precision.



Product Specification	Model: HTS-AI	
	02	01
Measurement Range	$\geq \pm 20g$	$\geq \pm 20g$
Bias	$\leq \pm 7mg$	$\leq \pm 7mg$
Bias Temp Coefficient	$\leq \pm 50 \mu g/^{\circ}C$	$\leq \pm 80 \mu g/^{\circ}C$
Bias Repeatability	$\leq 60 \mu g$ (3~7 days)	$\leq 60 \mu g$ (1 day)
Scale Factor	1.1~1.5 mA/g	1.1~1.5 mA/g
Scale Factor Temp Coefficient	$\leq \pm 60 ppm/^{\circ}C$	$\leq \pm 80 ppm/^{\circ}C$
Scale Factor Repeatability	$\leq 60 ppm$ (3~7 days)	$\leq 60 ppm$ (1 day)
Second-order Nonlinearity	$\leq \pm 50 \mu g/g^2$	$\leq \pm 50 \mu g/g^2$
Second-order Nonlinearity Repeatability	$\leq 50 \mu g/g^2$ (one month)	$\leq 50 \mu g/g^2$ (one week)
Operating Voltage	$\pm 12 \sim \pm 15 V$	$\pm 12 \sim \pm 15 V$
Operation Temperature	$-45 \sim +100^{\circ}C$	$-45 \sim +100^{\circ}C$
Shock	120g, 4.5ms, 1/2sin	120g, 4.5ms, 1/2sin
Vibration	8 grms	8 grms
Dimension	$\Phi 25.4 * 30 mm$	$\Phi 25.4 * 30 mm$
Weight	$\leq 80g$	$\leq 80g$

Dimension drawing



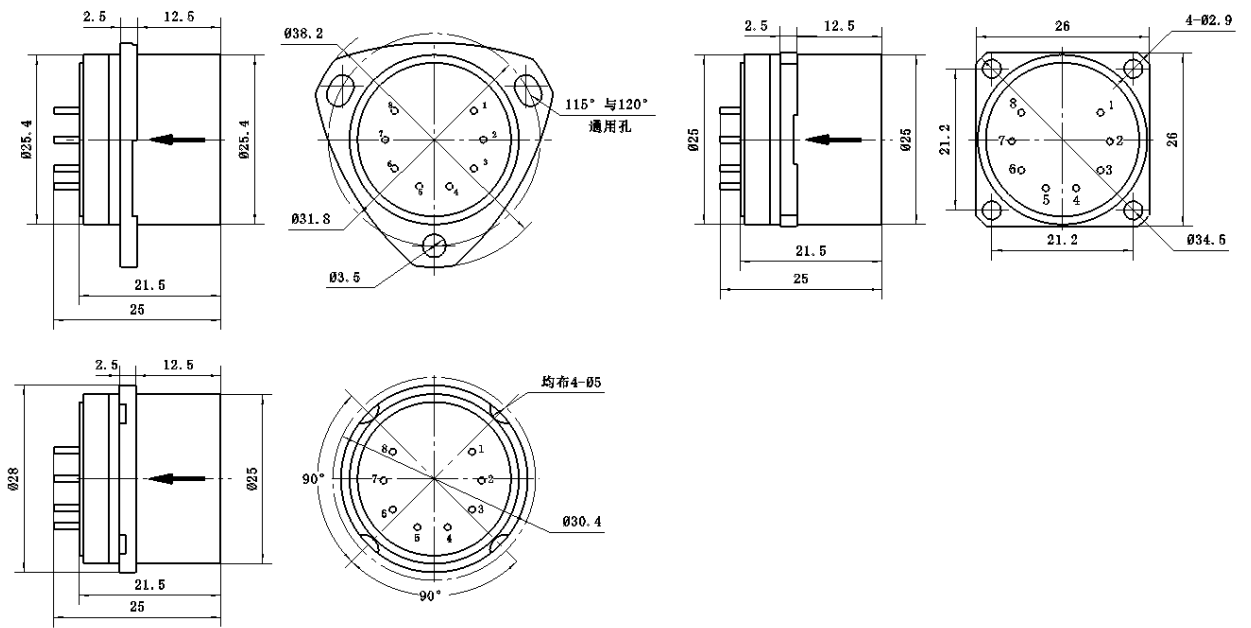
Product Model: HTS-BI

Application: Mainly used in the inclination-while-drilling system and continuous inclination-measuring system of oil drilling, and can be widely used in other systems with bad working environment.



Product Specification		Model: HTS-BI	
		02	01
Measurement Range		≥±10g	≥±10g
Bias		≤±10mg	≤±10mg
Bias Temp Coefficient		≤±60 µg/°C	≤±80 µg/°C
Bias Repeatability		≤100 µg (3~7 days)	≤100 µg (1 day)
Scale Factor		2.5~3.5 mA/g	2.5~3.5 mA/g
Scale Factor Temp Coefficient	Room Temp~120°C	≤±80 ppm/°C	≤±100 ppm/°C
	120°C ~150°C	≤±500 ppm/°C	≤±500 ppm/°C
Scale Factor Repeatability		≤100 ppm (3~7 days)	≤100 ppm (1 day)
Shock		1000g,0.5ms,1/2sin	1000g,0.5ms,1/2sin
Vibration		20g(20~2000Hz)	20g(20~2000Hz)
Operating Voltage		±7~±12 V	±7~±12 V
Operation Temperature		-45~+150 °C	-45~+150 °C
Operation Temperature		-40~+150 °C	-40~+150 °C
Weight		≤55g	≤55g

Dimension drawing



Product Model: HTS-CI

Application: Mainly used in the inclination-while-drilling system and continuous inclination-measuring system of oil drilling, and can be widely used in other systems with bad working environment.



Product Specification		Model: HTS-CI	
		02	01
Measurement Range		≥±10g	≥±10g
Bias		≤±10mg	≤±15mg
Bias Temp Coefficient		≤±60 μg/°C	≤±100 μg/°C
Bias Repeatability		≤100 μg (1 day)	≤100 μg (1 day)
Scale Factor		2.5~3.5 mA/g	2.5~3.5 mA/g
Scale Factor Temp Coefficient	Room Temp~120°C	≤±120 ppm/°C	≤±150 ppm/°C
	120°C ~150°C	≤±200 ppm/°C	≤±500 ppm/°C
Scale Factor Repeatability		≤100 ppm (1 day)	≤100 ppm (1 day)
Shock		1000g,0.5ms,1/2sin	1000g,0.5ms,1/2sin
Vibration		20g(20~2000Hz)	20g(20~2000Hz)
Operating Voltage		±7~±12 V	±7~±12 V
Operation Temperature		-45~+150 °C	-45~+150 °C
Operation Temperature		-40~+150 °C	-40~+150 °C
Dimension		Φ21.1*15 mm	Φ21.1*15 mm
Weight		≤30g	≤30g

Dimension drawing

