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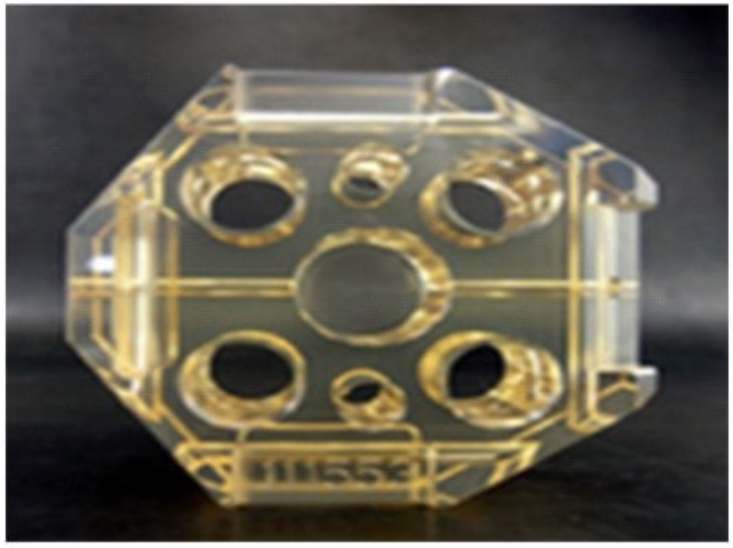
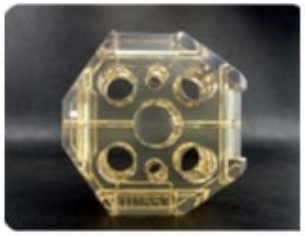
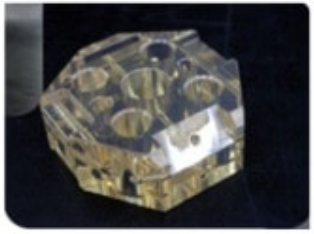
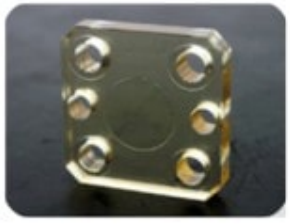
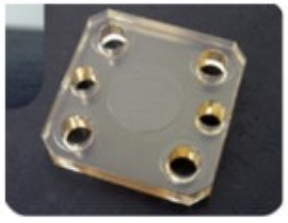
Special Prism for Gyroscope











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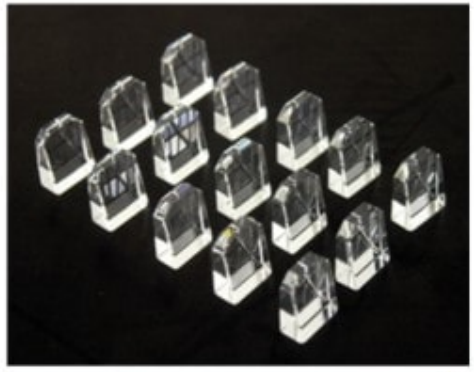
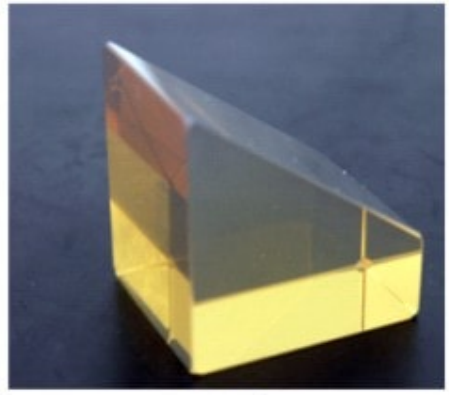
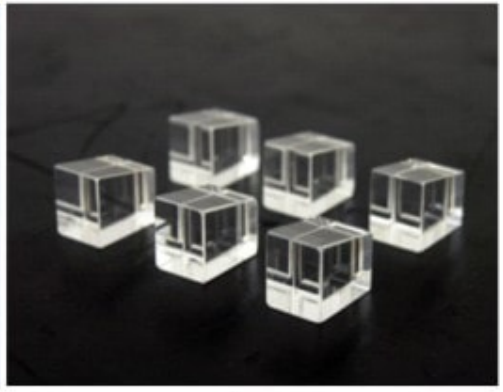
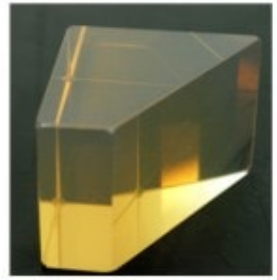
High-flatness Level Prism

of Gyroscope









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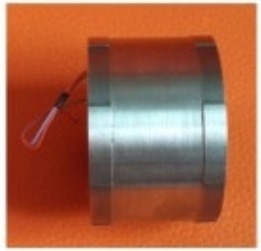
Cathode and Anodes

for Laser Gyroscope

Filter Wheels

Filter wheels (dithering wheels) are the key components of ring laser gyroscopes.



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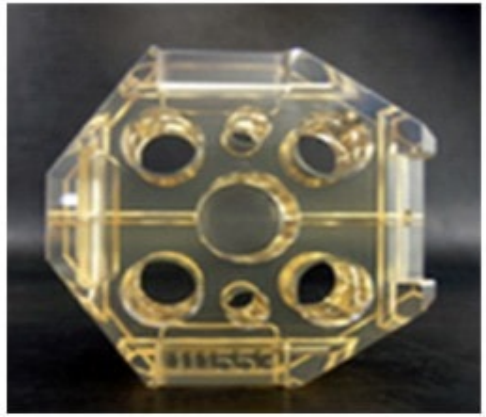
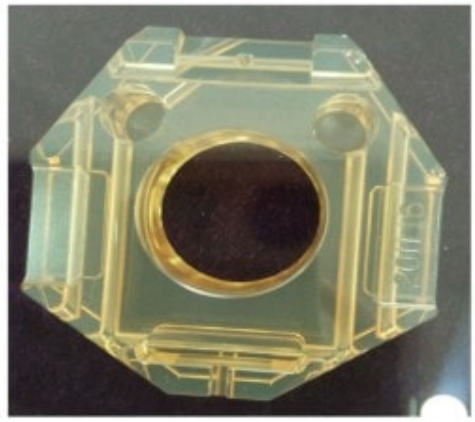
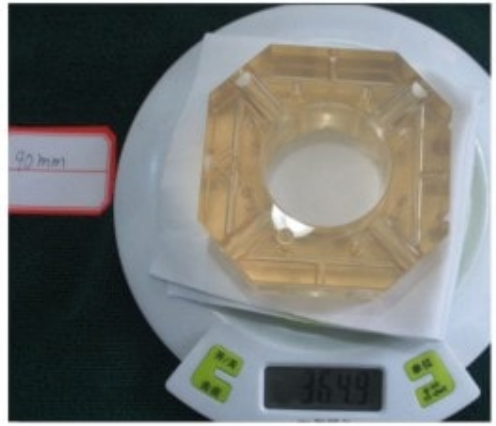
High-level Flatness Gyro Blocks







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MH-HK221

Military Inertial Navigation System

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PRODUCT OVERVIEW

MH-HK221 was designed as an integrated inertial navigation system for airborne platform. Featuring a laser gyroscope and a perfect quartz accelerometer and advanced alignment technology on navigation algorithm, MH-HK221 can perform initial alignment and navigation functions in harsh environment. The miniature rugged navigation system can continuously and real-timely provide with carrier's position (latitude and longitude), speed, acceleration, attitude and heading, and detailed navigation information according to flight mission.

MAIN FEATURES

* High precision, small size and high reliability.
* MH-HK221 has an ability of alignment on base swaying.
* With higher reliability, the latest instrument is highly adaptable to environment.

MAIN APPLICATION

MH-HK221 gives best performance at a consumer price and has been widely applied to civil aviation, airborne test equipment and other fields.

SPECIFICATION

NO.	ITEM	INDEX		NOTES
		Class A	Class B	
1	Heading accuracy	0.05°/h	0.1°/h	1σ
2	Attitude accuracy	0.05°/h	0.1°/h	1σ
3	North-seeking time	5min	5min	1σ
4	Positional accuracy (gyroscope free)	0.8nm/h	1.2nm/h	
5	Position accuracy (according to single point GPS or BDII)	5m	10m	(CEP)
6	Laser gyro zero bias stability	0.01°/h	0.02°/h	1σ
7	Laser gyro scale factor	2PPm	5PPm	
8	Acceleration zero bias stability	0.05mg	0.1mg	1σ
9	Impact force	20g	20g	
10	Operating temperature	-40°C～60°C	-40°C～60°C	
11	Dimensions	333mmX157mmX219mm		
12	Weight	≦12kg		
13	Power	18VDC～36VDC		
14	Data communication	RS232、RS422、CAN		Selectable
15	MTBF	≧1500h		
16	Data refresh rate	160Hz		
17	Baud rate	115200bps		

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MH-IMU1D

Laser Inertial Measurement Unit

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PRODUCT OVERVIEW

Compensation model can be set with high precision and excellent long-term stability. With varies Interface forms, this advanced equipment can be customized according to user needs. MH-IMU1D is characterized by smaller size, lighter weight and stronger environmental adaptability.

MAIN FEATURES

* Compensation model can be set with high precision and excellent long-term stability.
* With varies Interface forms, this advanced equipment can be customized according to user needs.
* MH-IMU1D is characterized by smaller size, lighter weight and stronger environmental adaptability.

MAIN APPLICATION

MH-IMU1D advanced laser inertial measurement unit is widely applied to integration of on-board navigation systems, integration of land use positioning and orientation systems, mobile measurement of position and attitude measurement systems , high-speed rail track measuring systems, high precision servo-control system and other fields.

SPECIFICATION

NO.	ITEM	INDEX		NOTES
		Class A	Class B	
1	Roll, pitch and azimuth angular rate	≦±300°/S		
2	Constant bias	≦±0.5°/h	≦±0.5°/h	
3	Bias stability	≦0.015°/h	≦0.020°/h	1σ
4	Bias repeat ability	≦0.015°/h	≦0.020°/h	1σ
5	Accelerometer range	±30kg	±30kg	
6	Accelerometer zero bias stability	0.05mg	0.1mg	Specifiable
7	Accelerometer bias repeat ability	0.05m	0.05m	
8	Start-up time	< 20s		
9	Operating temperature	-40°C～70°C		
10	Impact force	15g/30g		
11	Dimensions	212mmX195mmX175mm		
12	Weight	≦11kg		
13	Power	Accelerometer : +5V1, +5V2, -5v, ±15V Gyro : ±5V, +12v, -12v1, -12v2		
14	Data communication	RS422		
15	Data refresh rate	400Hz		
16	Baud rate	230400bps		

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MH-IMU711

Mems Microcomputer Inertial Measurement Unit

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PRODUCT OVERVIEW

MH-IMU711 inertial measurement unit, a kind of inertial measurement equipment with strong impact resistance, can precisely measure three axes angular rate and linear acceleration of the carrier in the inertial space.

MAIN FEATURES

* Seal design, strong environment adaptability.
* Fine vibration, strong overload resistance.
* Can work normally in full temperature range (-40℃~+60℃).

MAIN APPLICATION

This product can be used for measuring, surveying and mapping, guided munition, civil aviation, vehicles, and the dedicated devices, etc.

SPECIFICATION

NO.	ITEM	INDEX	Remark
1	Angular rate measurement dynamic range	X: ±300°/s, Y、Z: ±150°/s	
2	Zero-bias constant	‹0.02°/s	
3	Zero-bias stability	≤300°/h	1σ
4	Zero-bias repeat ability	≤300°/h	1σ
5	Scale factor nonlinear	0.5%	
6	Accelerometer zero-bias	±2g	
7	Accelerometer zero-bias stability	≤5mg	1σ
8	Accelerometer scale factor nonlinearity	‹0.5%	
9	Ambient temperature	-40℃~65℃	
10	Volume	80mmX80mmX60mm	
11	Weight	≤1000g	
12	Power	6.5VDC	
13	Interface	TTL serial port	
14	Data update rate	200Hz	
15	Baud rate	115200bps	

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MH-IMU7200

Military Compact Inertial Measurement Unit

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Tel.: 0086-29-89589035
Website: www

PRODUCT OVERVIEW

MH-IMU7200 was designed as a high-precision inertial measurement device. This inertial sensor can conduct an accurate measurement of the carrier's pitch and roll angles with respect to inertial space.

MAIN FEATURES

* With high precision, MH-IMU7200 has reached the first-class level in China.
* This quick measuring equipment is characterized by perfect vibration performance and strong anti-shock ability.
* This inertial sensor can work properly in the full temperature range (-45°~+70°).
* As a seal design, MH-IMU7200 Compact Inertial Measurement Unit is highly adaptable to various environment.

MAIN APPLICATION

MH-IMU7200 is very applicable to measuring, mapping, guided munitions, aviation, vehicles, special equipment and other fields.

SPECIFICATION

NO.	ITEM	INDEX	NOTES
1	Roll, pitch and azimuth angular rate	±200°/S	
2	Constant bias	0.02°/S	
3	Bias stability	<20°/h	1σ
4	Bias repeat ability	≦0.2°/S	1σ
5	Scale factor nonlinearity	0.20%	
6	Acceleration zero bias	<0.5mg	
7	Acceleration zero bias stability	≦1.5mg	1σ
8	Acceleration zero bias repeat ability	≦1.5mg	1σ
9	Acceleration scale factor nonlinearity	<0.05%	
10	Pitch angle stability	<0.1°	
11	Roll angle stability	<0.1°	
12	Operating temperature	-45°C~70°C	
13	Dimensions	172mmXΦ49mmX32mm	
14	Weight	≦335g	
15	Power	24VDC(10V~40V available)	
16	Data communication	RS422	
17	Data refresh rate	100Hz	
18	Baud rate	115200bps	

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MH-JG111D

Military Uniaxial Laser Gyro

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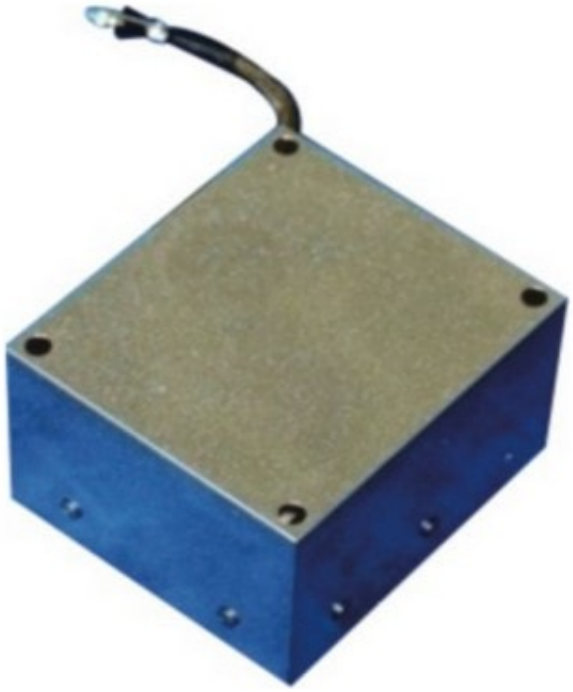

PRODUCT OVERVIEW

Characterized by digitization and high precision, laser gyro is developed independently according to inertial application. Digital output is easily made without need of auxiliary circuit. It is pretty convenient, more reliable, highly adaptable to environment.

MAIN FEATURES

* As its digital output, it is convenient.
* The service life is more than 100,000 hours with high levels of reliability.
* It can work with low operating voltage (5~8VDC) and small power consumption.
* With strong shock resistance ability, it is highly adaptable to environment.

MAIN APPLICATION

It is suitable for vehicle and airborne based position and azimuth determining system, inertial navigation system(INS), high precision gyro-based north seeker, attitude measurement system, high-speed rail measurement system, road deflection measurement system. Due to its excellent technology, it can protect against larger shock environment and specially be applied in particular environment.

SPECIFICATION

NO.	ITEM	INDEX			NOTES
		Class T	Class A	Class B	
1	Constant bias	≦±0.5°/h	≦±0.5°/h	≦±0.5°/h	1σ
2	Zero bias stability	≦0.010°/h	≦0.015°/h	≦0.020°/h	1σ
3	Bias repeatability	≦0.010°/h	≦0.015°/h	≦0.020°/h	1σ
4	Radom walk coefficient	≦0.002°√/h	≦0.003°√/h	≦0.005°√/h	1σ
5	Scale factor nonlinearity	≦2ppm	≦5ppm	≦10ppm	1σ
6	Scale factor repeat ability	≦2ppm	≦5ppm	≦10ppm	
7	Measurement range of angular velocity	≦±300°/s			
8	Output angle increment	0.58"/Pulse			
9	Startup time	<10s			
10	Operating temperature	-40°C~70°C			
11	Impact force	30g			
12	Volume	125mmX111mmX85mm			
13	Weight	≦2kg			
14	Power supply	±5V, ±12V, ±45V, ±15V			
15	Interface	RS422			
16	Data refresh rate	400Hz			
17	Baud rate	115200bps			

Military Quality Systems, Making The World Safer!

MH-JG132A

Three-axis Monolithic Ring Laser Gyroscope

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PRODUCT OVERVIEW

The premier MH-JG132A three-axis monolithic ring laser gyroscope was designed as a three-axis monolithic ring laser gyroscope (MRLG) with two laser gyroscope assemblies and a single-axis laser gyroscope. Accelerometer installation location can be reserved according to user needs. MH-JG132A provides with special customized secondary power supply. The main function is the accurate measurement of angular motion vector information with respect to inertial space, and can be output to users in the form of angular increments. MH-JG132A is utilized in system-level product development such as inertial navigation, positioning and orientation, attitude position determination.

MAIN FEATURES

* Small size, light weight.
* Modular design, good interchangeability.
* With a customized design, the high performance gyroscope is easy for system integration.

MAIN APPLICATION

JG132A three-axis Monolithic Ring Laser Gyroscope gives best performance at a consumer price and has been successfully utilized in vehicle navigation systems, strap-down inertial navigation systems, mobile position and attitude determination systems.

SPECIFICATION

NO.	ITEM	INDEX		NOTES
		Class A	Class B	
1	Roll, pitch and azimuth angular rate	≦ ±300°/S		
2	Constant bias	≦±0.5°/h	≦±0.5°/h	
3	Bias stability	≦0.015°/h	≦0.020°/h	1σ
4	Bias repeatability	≦0.015°/h	≦0.020°/h	1σ
5	Output angle increment	≦0.58"/LSB		
6	Start-up time	< 20s		
7	Operating temperature	-40°C～70°C		
8	Impact force	15g/30g		
9	Dimensions	203mmX195mmX130mm		
10	Weight	≦8kg		
11	Power	±5V, +12v, ±45V, -12v1, -12v2, -12v3, -12v4		
12	Data communication	RS422		
13	Data refresh rate	100Hz		
14	Baud rate	115200bps		

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MH-LP212A

Military Inertial Navigation System

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PRODUCT OVERVIEW

The state-of-the-art MH-LP212A was designed as a small and lightweight Navigation System for military market. Featuring a Monolithic Ring Laser Gyro (MRLG) and an accelerometer triad, MH-LP212A inertial sensors are tightly coupled with GPS/BDII to give best performance in its class at a consumer price. This latest instrument can be operated in continuous mode at a high speed while simultaneously sending data to the surface equipment. Long life assured, it is utilized in numerous applications, especially in vehicles with bad shock environment. MH-LP212A unit can be integrated with our standard CDU (Central Display Unit) and PNU that can be used both in laboratories and outside, thus ensuring information collection, monitoring, processing between this navigation system and other related devices.

MAIN FEATURES

* High-precision inertial, strong shock resistance ability, and usually applied to large mobile environment.
* With strong shock resistance ability, this advanced device can protect against more than 400g impact force instantaneously.
* With perfect integrated navigation function, MH-LP212A is tightly coupled with GPS/BDII and provides the best navigation with an automatic selection of optimal choices according to vehicle environment.
* MH-LP212A has the best adaptive design, and can access to various communication interfaces (RS232、RS422、CAN).

SPECIFICATION

NO.	ITEM	INDEX		NOTES
		Class A	Class B	
1	Heading accuracy	1mil	2mil	1σ
2	Attitude accuracy	0.2mil	1mil	1σ
3	North seeking time	5min	5min	1σ
4	Positional accuracy (gyroscope-free)	0.2%D	0.5%D	D stands for mileage (km)
5	Position accuracy (according to single point GPS or BDII)	5m	10m	(CEP)
6	Laser gyro zero bias stability	0.01°/h	0.02°/h	1σ
7	Laser gyro scale factor	2PPm	5PPm	
8	Acceleration zero bias stability	0.05mg	0.1mg	1σ
9	Impact force	300g	300g	
10	Operating temperature	-40°C~65°C	40°C~65°C	
11	Dimensions	318mmX318mmX290mm		
12	Weight	≦30kg		
13	Power	18VDC~36VDC		
14	Data communication	RS232、RS422、CAN		Selectable
15	MTBF	≦1500h		
16	Data refresh rate	100Hz		
17	Baud rate	115200bps		

MAIN APPLICATION

MH-LP212A offers a low-cost, low-weight, navigation solution to a wide variety of vehicles, especially in bad shock environment.

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MH-LP251A

Attitude and Heading Reference System

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PRODUCT OVERVIEW

MH-LP251A was designed as an integrated inertial navigation system for airborne platform. Featuring a laser gyroscope and a perfect quartz accelerometer and advanced alignment technology on navigation algorithm, MH-LP251A can perform initial alignment and navigation functions in harsh environment. This latest instrument can continuously and real-timely provide with carrier's position (latitude and longitude), speed, acceleration, attitude and heading, and detailed navigation information according to flight mission.

MAIN FEATURES

* High precision, small size and high reliability.
* Highly adaptable to varies environment.
* Ability of alignment on base swaying.

MAIN APPLICATION

MH-LP251A compact attitude and heading reference system gives best performance at a consumer price and is widely utilized in measuring dynamic attitude and providing attitude information for pods and other platforms.

SPECIFICATION

NO.	ITEM	INDEX	NOTES
1	Course deviation	0.5mil/h	1σ
2	Attitude deviation	0.2mil/h	1σ
3	Operating temperature	-40°C～60°C	
4	Impact force	30g	
5	Dimensions	Φ436mmX98mm	Miniaturization Available
6	Weight	≦13.5kg	
7	Power	18v～36v	
8	Power consumption	≦30w	Selectable
9	Data communication	RS422、Ethernet Channel	
10	Reliability prediction	≧1500h	
11	Data refresh rate	25Hz	
12	Baud rate	115200bps	

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MH-LP261

Military Rugged North Seeker

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PRODUCT OVERVIEW

MH-LP261 comprises the latest north seeking gyro technology which provides highly accurate and reliable data. Featuring a ring laser gyroscope(RLG), MH-LP261 North-seeker gives best performance at a consumer price and is widely applied to informationized automotive vehicles with a certain anti-shake capability. The high-speed continuous north seeking gyro is characterized by high precision, excellent reliability, strong environmental adaptability.

MAIN FEATURES

* It has conversion capability between UTM coordinate system and WGS84 coordinate system.
* The operational interface is visual and succinct.
* It can work properly in the temperature range from -40°C to 65°C.

MAIN APPLICATION

It has been widely used in the field of land vehicle, industrial applications, precise tilt measurement, measurement and calibration of laboratory equipment as well as heavy equipment, road, rail, aviation, shipping.

SPECIFICATION

NO.	ITEM	INDEX	NOTES
1	North-seeking time	5min	
2	North-seeking accuracy	0.5mil/1mil	Selectable Precision 1 σ
3	Operating temperature	-40℃～70℃	
4	Impact force	30g	
5	Dimensions	340mmX230mmX220mm	
6	Weight	≦16kg	
7	Power	18v～36v	
8	Interface	RS422, Ethernet	
9	Reliability prediction	≧1500h	
10	Baud rate	115200bps	Selectable

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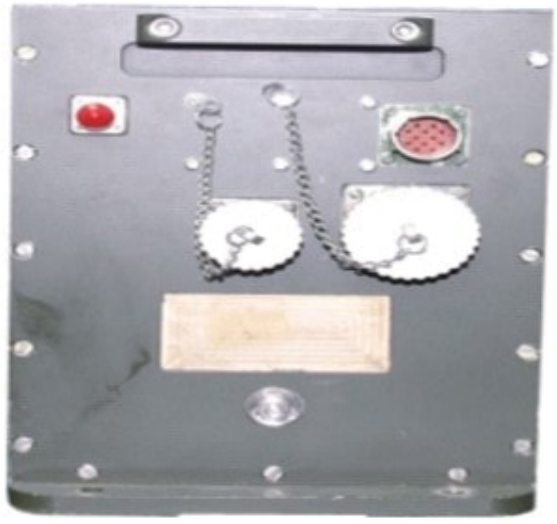
MH-LS10

Military Position Azimuth Determining System



PRODUCT OVERVIEW

MH-LS10 azimuth determining navigation system, a small multi-functional integrated navigation system developed by the high laser gyro and the quartz accelerometer as its key inertial devices, is the miniaturized, light-weighted version of the LP21system, which can provide information about the vehicle's instant position (longitude and latitude), speed, acceleration, the vehicle's attitude and heading continuously and real-timely and the detailed navigation information based on the driving-task plan for the most application of the general vehicle platform.

MAIN FEATURES

* High precision pure inertia, small volume, and light weight, and complete integrated navigation functions, which can combine with the satellite navigation (support for the GPS, the big dipper II), and navigate based on the environment to choose the optimal combination automatically for the optimal navigation results.
* Good adaptability suitable for multiple interfaces (RS232, RS422, CAN bus or other communication form) makes it easily to operate and apply.

MAIN APPLICATION

This product is the general land used model, thus can satisfy the vast majority of vehicles and carriers.

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SPECIFICATION

NO.	ITEM	INDEX		NOTES
		Class A	Class B	
1	Heading accuracy	1mil	2mil	1σ
2	Attitude accuracy	0.2mil	1mil	1σ
3	North seeking time	5min	5min	1σ
4	Positional accuracy (gyroscope-free)	0.2%D	0.5%D	D stands for mileage (km)
5	Position accuracy (according to single point GPS or BDII)	5m	10m	(CEP)
6	Laser gyro zero bias stability	0.01°／h	0.02°／h	1σ
7	Laser gyro scale factor	2PPm	5PPm	
8	Acceleration zero bias stability	0.05mg	0.1mg	1σ
9	Impact force	300g	300g	
10	Operating temperature	-40°C~65°C	-40°C~65°C	
11	Dimensions	318mmX318mmX290mm		
12	Weight	≦30kg		
13	Power	18VDC~36VDC		
14	Data communication	RS232、RS422、CAN		Selectable
15	MTBF	≦1500h		
16	Data refresh rate	100Hz		
17	Baud rate	115200bps		

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MH-MINIR384

Advanced MINIR Thermal Imaging Module

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Module

Module+Lens

PRODUCT OVERVIEW

MH-MINIR series thermal modules are one of the smallest thermal imaging modules in the world, which use the latest 384x288 17um FPA uncooled detector. Offering the brilliant video quality and customized connection interface, it will bring you great success in your system integration.

MAIN FEATURES

* Ultra small size
* Customized start-up picture
* Short start-up time: 3s
* Low power consumption 0.5W
* Self-adaptive image calibration technology
* High image frequency
* 16bit and BT.656 digital video output option

APPLICATION

MH-MINIR384 is configurated to fit the specific needs of system and camera integration.

Vehicle Monitor Telescope Helmet

SPECIFICATION

Detector	
Detector type	Uncooled amorphous silicon FPA
FPA format, px	384x288
Pixel pitch, μm	17
Sensitivity	≤80mk at f/1.0 300K
Frame rate, Hz	50Hz
Spectral range, μm	8~14
Controls	
Polarity	White hot/black hot
E-Zoom, x	2x/4x
Brightness/contrast	Auto/manual
Image reversal	Horizontal/Vertical
Crosshair	Yes
Interface	
External power supply	Yes
Digital video output	14 Bit(50Hz)/BT.656(customized)
Communication	RS-232
Analogue video	Yes
Keyboard	Yes
Image Processing	
Self-adaption calibration	Yes
Time to image	<3s
Image enhancement	DDE
Image display resolution, px	768x576
Lens(optional), mm	Optional 12mm,19mm,35mm,50mm,75mm,100mm
Environment	
Operation temperature range, ℃	-20℃~+60℃ -40℃~+60℃ (option)
Non-operating temperature, ℃	-45℃~+65℃
Shock	Vibration: GJB 150-16 2.3.1 GJB 150-18 Test7 100g/6ms
Temperature shock	-5℃/min(-40℃~+60℃)
Power	
Operation voltage range, V	DC: +2.5V~+5.5V(typical 3.7V)
Power consumption, W	<0.5W
Physical Attributes	
Weight, g	33g
Size, mm	24x24mm(only PCB)

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MH-MINIR640

Advanced MINIR Thermal Imaging Module

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Module

Module+Lens

PRODUCT OVERVIEW

MH-MINIR series thermal modules are one of the smallest thermal imaging modules in the world, which uses the latest 640x480 17um FPA uncooled detector. Offering the brilliant video quality and customized connection interface, it will bring you great success in your system integration.

MAIN FEATURES

* Ultra small size
* Customized start-up picture
* Short start-up time: 3s
* Low power consumption 0.5W
* Self-adaptive image calibration technology
* High image frequency
* 16bit and BT.656 digital video output option

APPLICATION

MH-MINIR640 is configurated to fit the specific needs of system and camera integration.

Vehicle Monitor Telescope Helmet

SPECIFICATION

Detector	
Detector type	Uncooled amorphous silicon FPA
FPA format, px	640x480
Pixel pitch, μm	17
Sensitivity	≤60mk at f/1.0 300K
Frame rate, Hz	50Hz
Spectral range, um	8~14
Controls	
Polarity	White hot/black hot
E-Zoom, x	2x/4x
Brightness/contrast	Auto/manual
Image reversal	Horizontal/Vertical
Crosshair	Yes
Interface	
External power supply	Yes
Digital video output	14 Bit(50Hz) / BT.656(customized)
Communication	RS-232
Analogue video	Yes
Keyboard	Yes
Image Processing	
Self-adaption calibration	Yes
Time to image	<3s
Image enhancement	DDE
Image display resolution, px	640x480
Lens(optional), mm	Optional 12mm,19mm,35mm,50mm,75mm,100mm
Environment	
Operation temperature range, ℃	-20℃~+60℃ -40℃~+60℃ (option)
Non-operating temperature, ℃	-45℃~+65℃
Shock	Vibration: GJB 150-16 2.3.1 GJB 150-18 Test7 100g/6ms
Temperature shock	-5℃/min(-40℃~+60℃)
Power	
Operation voltage range, V	DC: +2.5V~+5.5V(typical 3.7V)
Power consumption, W	<1W
Physical Attributes	
Weight, g	33g
Size, mm	24x24mm(only PCB)

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MH-75-3/6

Thermal Weapon Sight with 75mm Lens

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PRODUCT OVERVIEW

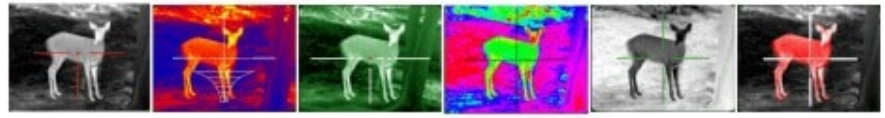
This series thermal scope adopt advanced high resolution 384x288px / 640x480px uncooled thermal sensor. This series are a solid state, uncooled, long-wave infrared, magnified dedicated weapon scope intended for day and night engagements without the need to remove the sight from the rifle. And they are great helpful equipment for hunting lovers. Thermal image can cut through total darkness, haze, dust,fog and smoke to detect target, and help to see through various animal camouflage. With proper mount with hunting gun like 1913 picatinny rail, the thermal image also helps to shoot the animals.

MAIN FEATURES

* Non light leakage eyepiece design
* Various reticle patterns . The brightness of the reticle can be adjusted
* Selectable color modes, white hot/black hot/ green hot/ rainbow/various colors
* Multiple power supplies
* Real-time video output
* 1913 Picatinny

SPECIFICATION

Model	MH-75-3/6
Sensor resolution, px	Uncooled 384x288px /640x480px
Material	Amorphous Silicon
Image size, px	800x600 px
Frame rate, Hz	50Hz
Video output	Yes
Display	Color OLED matrix, SVGA<800x600
Thermal sensitivity	<50 mK
Spectral range, μm	7~14
Lens system	75mm F1.0
FOV, deg	(H x V) 5.0°x3.7°/ 8.3°x6.2°
Eye relief	52mm
Optical magnification, x	6x/3.5x
E- Zoom, x	1X/2X/4X
Diopter, D	-4 to +2
Distance of the human detection, m	1400/1800
Distance of the human recognition, m	600/750
Distance of the human identification, m	350/460
Palette	White hot/black hot/ multiple color modes
Environmental rating	Waterproof /dustproof
Start up time	<5 sec
Operating temperature	-40°C to +50°C
Storage temperature	-45°C to +85°C
Battery type	4 x CR123A battery type
Battery life, hour	8
Low battery indicator	Yes
Dimension, mm	300x55x60
Weight, g	1300



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MH-NVGs

Gen 2+/3 Military Night Vision Goggles

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PRODUCT OVERVIEW

Night vision goggles were developed to meet military and law enforcement requirements for surveillance at night. This night vision goggles can be viewed by two eyepieces, multipurpose functions support it not only can be mounted with helmet but also can be used for hand-held. Small in size, light in weight. Magnification can be changed by replacing different objectives, 1x and 3x and 5x are available. Other objective lens with different focal distance can be also provided to meet your needs.

MH-NVGs adopts Gen 2+ or Gen 3 image intensifier tube with the function of anti-glare and built-in IR illuminator. It is mainly used for military observation, sea defense, frontier reconnaissance, drug smuggling investigation, vehicles and aircraft maintenance.

MAIN FEATURES

* Internal "low battery" and "IR on" indicators.
* Wide angle infrared illuminator, long range viewing.
* Adjustable interpupillary distance.
* Automatic brightness control.
* Waterproof, corrosion and dust-resistance.
* Multipurpose: hand-held,head-mounted or helmet mounted. PASGE and ACH/MICH helmets mountable allowing for "hands-free" operation.

The eyepieces can be adjusted to the left and right according to the different interpupillary distance.

SPECIFICATION

Model	MH-NVGs, Gen2+/3
Magnification, x	1
Lens system	26.8mm F/1.2
Adjusted Interpupillary distance, mm	Yes
Focus range, m	0.25 to infinity
Eye relief distance, mm	15
Power supply	1 CR123A type battery, 3V
Diopter setting, D	+5, -6
Dimension, mm	160x150x75
Weight(with 2 batteries), g	500
GEN II / GEN III IMAGE INTENSIFIER TUBES	
Photocathode type	18mm S-25
Photocathode sensitivity, μA/lm	≥550
Resolution, lp/mm	48-58/57-64
Luminous gain, fl/fcd	16000-25000
Signal -to -noise ratio, typical	20:1 or better
Tube reliability, hour	10000
Keep time, year	10
EFFECTIVE DISTANCE	
Detection range, m	220-280
Recognition range, m	175-230
ENVIRONMENTAL DATA	
Operating temperature, ℃	-40℃ to +50℃
Storage temperature, ℃	-30℃ to +50℃
Immersion, hour	2 meter for 1.0(optional)
Humidity, %	up to 98%

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MH-NVB Series

Gen2+/3 Military Night Vision Binocular

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PRODUCT OVERVIEW

Night Vision binoculars were designed to be a cost effective night vision binocular without giving up quality or night vision performance, viewing long distance range at night under full darkness conditions.

This is a compact, lightweight, dual image tube system that provide for depth perception and the comfort of use and easy to operate. The best part is that if there is no light to amplify, with the help of the infrared illuminator, you can cut through the darkness.

It is widely used in night viewing, hunting, military, outdoor sports, animals viewing ...

MAIN FEATURES

* Powerful 5x magnification
* High resolution Gen2+/3 image intensifier tube
* Automatic ON/OFF proximity sensor
* Multi-coated all-glass optics
* Long-Range Infrared Illuminator, view long distance range
* Water and fog resistant

SPECIFICATION

Model	MH-NVB, Gen2+/3
Magnification, x	5
Field of view, deg	20°
Lens system	86mm F/1.2
Interpupillary distance, mm	57-72
Focus range, m	8.0 to infinity
Eye relief distance, mm	15
Diopter setting, D	+5, -5
Power supply, V	2x CR123 batteries , 3V
Automatic shut-off system	Yes
Infrared illuminator	Yes(focusing)
IR indicator	Yes (LED indicator)
Low battery indicator	Yes (LED indicator)
Battery life on IR, hour	20
Battery life off IR, hour	40
Environmental rating	Water, weather, dust and fog resistant
Dimension, mm	225x150x60
Weight, g	1600
GEN II/GEN III IMAGE INTENSIFIER TUBES	
Photocathode type	18mm S-25
Photocathode sensitivity, μA/lm	≥550
Resolution, lp/mm	48-58/57-64
Luminous gain, fl/fcd	19000-25000
Signal-to-noise ratio, typical	20:1 or better
Tube reliability standard, hour	10000
Keep time, year	10
EFFECTIVE DISTANCE	
Detection range, m	550-600
Recognition range, m	460-500
5mW IR illuminator, m	55-60
ENVIRONMENTAL DATA	
Operating temperature, ℃	-40℃ to +50℃
Storage temperature, ℃	-50℃ to +75℃
Immersion, hour	2meter for 1.0(optional)
Humidity, %	up tp 98%

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MH-Driver

Advanced Night Vision Thermal Car Camera System

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PRODUCT OVERVIEW

Infrared thermal imaging automobile driving assistant system can facilitate drivers to identify pedestrians in front of the vehicle in advance in the dark (without the night vision assistance system, this kind of identification would be realized quite late). The infrared night vision driving assistant system is capable of extracting the heat generating object which is not within the lighting vision of the vehicle yet from its background, displaying it in the screen, which greatly improves the driving experience of driver and the driving safety factor.

MH-Driver sees through the total darkness, thick smoke, dense fog, and other bad weather. It reveals unexpected obstacles, highlights sudden events. MH-Driver improves visibility of road signs, navigates on unknown roads and overcomes blindness caused by oncoming headlights, thus dramatically lowers the risks of driving and enhances the safety of lives, properties and profits. Featured extremely wide viewing range, incredible durability in diverse harsh environments, instant installation on any vehicles and high affordability for any limited budget.

MH-Driver is absolutely the perfect choice of driving assistant vision system.

MAIN FEATURES

* Rugged and compact design ensures easy integration
* Intelligent human vehicle recognition pre-alarm function
* Wide angle lens delivers super-wide viewing range
* Enabling a detection range 4 times further than traditional headlight
* Hermetically sealed water and dust proof

SPECIFICATION

Model	MH-Driver	
Thermal Imaging Detector(Sensor)		
Sensor type	400x300px Uncooled Microbolometer	
Spectral band, μm	8-14 microns (LWIR)	
Optical		
Lens focus	19mm	
Field-of-View, deg	28° x 21°	
Image Presentation		
Video output	50Hz	
Adjust	Auto brightness and contrast adjustment	
Image calibration	Auto calibration without shutter	
Image recognition	Auto pedestrian recognition	
Alarm	Auto	
Video output format	CVBS	
System Performance		
Start up time	≤ 8s	
Defroster	≤2℃ activiate defroster automatically @-30℃ device 1mm ice within 15m ≤7℃ close defroster automatically	
Power		
Power requirement, V	DC 7-36	
Power dissipation, W	≤3.5	
Interface		
Command and control	RS232	
Video output interface	Single-end/difference	
Environmental		
Operating temperature, ℃	-40℃ to 70℃	
Storage temperature, ℃	-45℃ to 85℃	
Rating	Ip67	
HD Screen		
Size	8 inches 4: 3 digital screen	
Resolution, px	1024 x 768	
Refresh rate, Hz	60-75	
Signal input interface	VGA / AV / BNC optional	
Video format	PAL/NTSC	
Power, V	DC 12V	
Effective Range		
Target	Human(1.8x0.5m)	Vehicle(2.3x2.3m)
Detection range, m	600	1200
Recognition range, m	140	360
Identification range, m	50	50

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MH 6100

Military Thermal Binocular

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PRODUCT OVERVIEW

MH 6100 Military binocular is rugged lightweight infrared binocular system that uses the latest in low-power, compact, uncooled thermal imaging technology. It used a 640x480px uncooled thermal sensor with 100mm(also can combined with 50mm/70mm lenses to different detection range) lens for middle or long distance application. The unique power save design can last battery operation time with fast start up and auto focus ability. Unlike image intensification night-vision devices that only magnify existing light, thermal imaging cuts through darkness, through smoke, dust and most fogs.

MAIN FEATURES

* Long detection range
* Day and night both use
* Real-time display and high thermal sensitivity
* IP67 Encapsulation
* Video recording and picture capture

SPECIFICATION

Model	MH 6100
Detector type	Un-cooled Microbolometer
Thermal sensor resolution	640x480px
Spectral range	8~14μm
Frame rate	50Hz
E-Zoom	2x/4x
Polarity	White hot/black hot/Multiple Color Modes
Focus	Auto/Manual focusing
Lens system	100mm/F1.2 lens can be disassemble and installation
FOV	6.2 °x 4.7 °
Display	640x480, Binocular LCOS display
Battery type	26650 rechargeable lithium battery battery, 4500mAh
Battery working time	>6hours
Power consumption	<3.0w(25℃)
Start up time	<5s
Video output interface	BNC, USB 2.0
Digital video storage	16G/32G
Housing	Full of Aluminum alloy
Mount adapter	Standard tripod mounting
Image format	JPEG
Video format	MPEG-4
Recording time	>8hours
Operating temperature	-30°C ~ +55°C
Storage temperature	-40°C ~ +60°C
Humidity	5%~95%
Shock	5-200-5Hz, acceleration of 2.5g
Protection level	IP67
Dimension	260x170x90mm
Net weight	1.3kg(exclude the battery)
Gross weight	5.5kg(include safety box)
Safety box size	460x320x180mm
Detection range of the human(1.8x0.5m)	3000m
Recognition range of human	1500m
Detection range of vehicle(2.3x2.3m)	4000m
Recognition range of vehicle	2000m

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