Gyro-Stabilized Platform



SPS-P230

Description:

Watson Industries has many years of experience developing sensor packages for stabilized camera platforms. Now we have taken the next step and are offering a complete system.

Our gyro-stabilized mount is built around a rugged pan and tilt mechanism. This is a high resolution digital system uses the best wide bandwidth, low noise, solidstate gyros. Watson's proprietary rate closure, zero error algorithms take commands from a remote joystick controller and drive a digital servo controller on the mount. The whole system is user configurable to adapt to a wide range of payloads and requirements.

Watson Industries also provides custom systems for special requirements. Our system design is modular and configurable for economical and quick adaptation to a wide variety of hardware configurations. Of course Watson Industries' excellent product support and applications engineering goes along with every product.

- High Stability
- High Reliability
- Low Cost
- Low Noise
- Two Year Limited Warranty
- Engineering Support



Stabilized Platform - Side Mount



Joystick Controller

Applications:

Uses for this platform include Mobile CCTV, video and film camera stabilization, antenna stabilization, range finders, stabilized lighting, aerial photo survey and coastal surveillance. These applications are for air, sea, and ground use.



Watson Industries, Inc.

3035 Melby StreetEau Claire, Wisconsin 54703 U.S.APhone: +1 (715) 839-0628Fax: +1 (715) 839-8248e-mail: support@watson-gyro.comWebsite: www.watson-gyro.com

SPS-P230 Specifications

Platform		
Range: Pan	$\pm 170^{\circ}$ (Electronic)	±175° (Mechanical)
Range: Tilt	$\pm 90^{\circ}$ (Electronic)	±95° (Mechanical)
Slew Rate: Bank, Elevation	$\pm 45^{\circ}/\text{sec}$	
Tilt Accuracy: Static	$\pm 1.5^{\circ}$	
Tilt Accuracy: Dynamic	$\pm 3.0^{\circ}$	
Noise:	0.1° rms	
Stability:	$\pm 1.5^{\circ}$	Over 20 minutes
Environmental		
Temperature: Operating	-20° C to $+50^{\circ}$ C	
Temperature: Storage	-50° C to $+80^{\circ}$ C	
Vibration: Operating	0.5 g rms	100 Hz to 1 KHz
Vibration: Survival	2 g rms	100 Hz to 1 KHz
Electrical	-	
Startup Time: Operational	10 seconds	
Startup Time: Full Performance	90 seconds	
Input Power:	18 to 30 VDC	
Input Current:	2A @ 28VDC	6A Peak
Physical		
Size: Including Mounting Flanges	6.7"W x 15.8"L x 9.2"H	17.0 x 40.1 x 23.4 (cm)
Weight:	28lb (12.7Kg)	Not including payload
Connection: RS-232	9 pin female "D" subminiature	On joystick controller
Connection: Power	MS3112E-8-4P (4 pin male)	On joystick controller
Connection: Interface	MS3102A-16S-1S (7 pin female)	On joystick controller
	MS3102A-20-7P (8 pin male)	On servo controller
Interface Cable: 5 meter	MS3106A-16S-1P 7 pin male end	MS3106A-20-7S 8 pin female
	mates to joystick controller	end mates to servo system
Capacity:	45 Kg	
Base Mounting Holes:	Qty 8 (4 x M6 threaded; 4 x #12 M6 clearance)	4" dia. bolt circle
Payload Mounting Holes:	Qty 8 #12 (M6 clearance)	4" dia. bolt circle
• Specifications are subject to change with	hout notice.	

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This product may be subject to export restrictions. Export Classification ECCN EAR99.



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