



Gyro-Stabilized Camera Mount

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, solid-state 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



Joystick Controller

Applications:

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



Watson Industries, Inc.

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Watson Stabilized Camera Mount Specifications

Pointing

Range: Pan	345°	Two limit stops
Range: Tilt (Stabilized)	±45° (Side Mounted)	-45° to +25° (Top Mounted)
Backlash	0.15° (Typical)	

Angular Rate

Range: Pan, Tilt	±100°/sec	
Resolution:	0.01°/sec	14 bit binary
Scale Factor Temp Coefficient:	+1% to -6%	Over temperature range
Bias: Pan, Tilt	0.5°/sec (Typical)	
Bandwidth:	> 70 Hz	
Noise:	< 0.02°/sec rms	1 Hz to 100 Hz

Platform

Sample Rate:	1000 Hz
Maneuver Rate:	±0.1 to ±12.5°/sec (Typical)
Stabilization Rate:	±48°/sec
Stabilization Accuracy:	0.1°/sec (Typical)

Environmental

Temperature: Operating	-20°C to +50°C	
Temperature: Storage	-50°C to +80°C	
Vibration: Operating	2g rms	100 Hz to 1 kHz
Vibration: Survival	5g rms	100 Hz to 1 kHz
Shock: Survival	100g	10ms ½ sine wave

Electrical

	<u>12V version</u>	<u>24V version</u>
Input Power:	10 to 15VDC	20 to 33VDC
Input Current:	1.2A (3.2A peak)	0.45A (1.75A peak)
Fuse Rating:	1.6A Hold (3.2A trip after 11.4 sec)	1.35A Hold (2.7A trip after 9.6 sec)

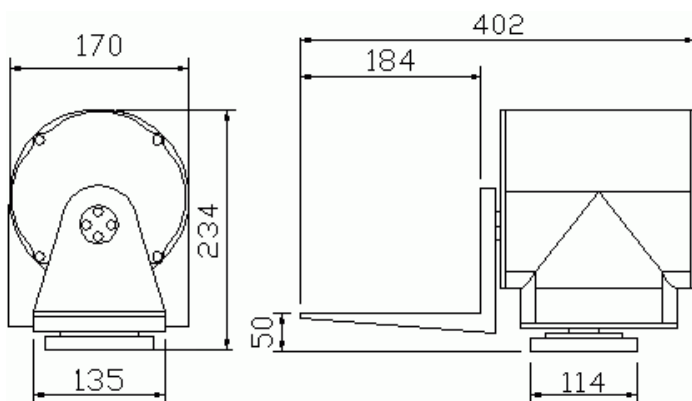
Physical

	<u>Side Mounted</u>	<u>Top Mounted</u>
Size: Including Mounting Flanges	402W x 170L x 234H (mm)	232W x 170L x 250H (mm)
Weight:	12kg	12kg
Capacity:	50kg (Balanced)	20kg (Balanced)
		Up to 45kg with load compensators
Base Mounting Holes:	4 x M6; 4 x 6.35mm holes	4"/101.6mm PCD
Platform Mounting Holes:	Keyhole slots	4"/101.6mm PCD
Standard Color:	BS4800 00 A05	BS4800 00 A05
	Gray textured semi-gloss	

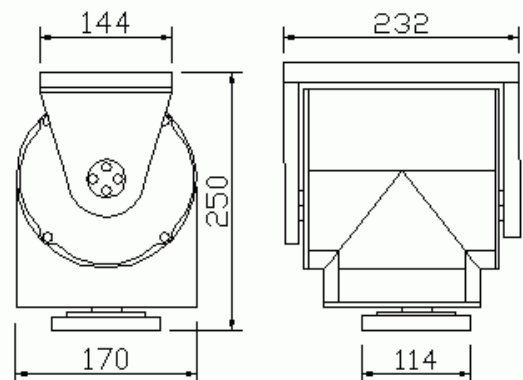
- Specifications are subject to change without notice.
- This product may be subject to export restrictions. Please consult the factory.

Dimensions: (mm)

Side Mounted Version



Top Mounted Version



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