Gyro-Stabilized Platform



SMS-P233

Description:

Stabilization is one of our specialties at Watson Industries. We have been involved with a large number of applications, from trains to cameras. The SMS is designed primarily for instrumentation: it stabilizes on the Bank (X) and Elevation (Y) axis so that the mounting arm with its payload will always stay level, regardless of the motions of the vehicle.

Our gyro-stabilized platforms are built around a rugged pan and tilt mechanism. This high resolution digital system uses the best wide bandwidth, low noise, solid-state gyros. The whole



system is user configurable and can 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 StabilityHigh Reliability
- Low Cost Low Noise
- Two Year Limited Warranty
- Engineering Support

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.

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SMS-P233 Specifications

Platform

Range: Bank, Elevation $\pm 30^{\circ}$ (Electronic) $\pm 45^{\circ}$ (Mechanical)

Slew Rate: Bank, Elevation $\pm 45^{\circ}/\text{sec}$ Attitude Accuracy: Static $\pm 1.5^{\circ}$ Attitude 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°C Temperature: Storage -50°C to +80°C

Vibration: Operating0.2 g rms100 Hz to 1 KHzVibration: Survival0.5 g rms100 Hz to 1 KHz

Electrical

Startup Time: Operational 5 seconds
Startup Time: Full Performance 90 seconds
Input Power: 18 to 30 VDC

Input Current: 2A @ 28VDC 6A Peak

Physical

Size: Including Mounting Flanges8.9"W x 15.8"L x 7.3"H22.6 x 40.1 x 18.5 (cm)Weight:28lb (12.7Kg)Not including payloadConnection:MS3102A-20-7PMating connector

included

Capacity: 25Kg With counterweight Base Mounting Holes: Qty 8 (4 x M6 threaded; 4 x #12 M6 4" dia. bolt circle

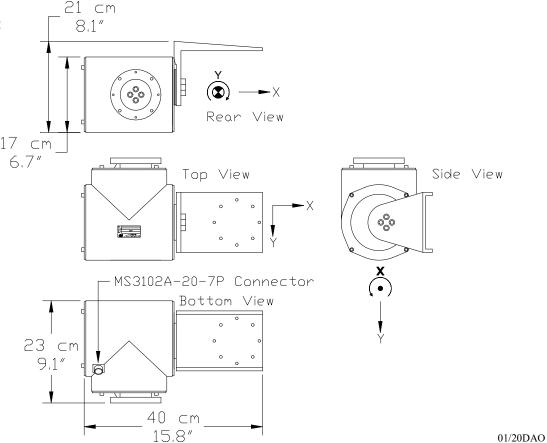
clearance)

Payload Mounting Holes: Qty 8 #12 (M6) clearance 4" dia. bolt circle

Specifications are subject to change without notice.

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

Dimensions:





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