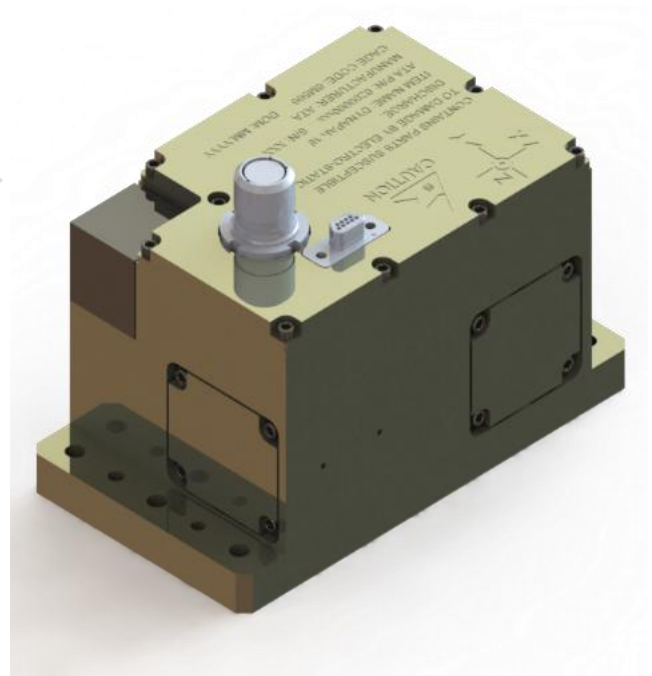


Dynapak 16

3-Axis ARS-16 Sensor Packages

The Dynapak 16 is designed to measure angular jitter from terrestrial, airborne, and spacecraft mirrors, optical systems or lasers, and for accurate line-of-sight imaging and platform stabilization. Dynapak 16 triaxial sensor packages provide a wide bandwidth angular rate measurement with ultra-low noise (typically <25nrad Noise equivalent angle between 1Hz and 1kHz). The Dynapak 16 is designed with no moving parts, and exhibits extremely low cross axis and linear vibration sensitivity errors. It is also designed to survive harsh shock and vibration environments and operate over a wide temperature range. Sense axis orientations are calibrated relative to a precision optical reference cube.

The Dynapak 16 outputs angular rate over a useful bandwidth of approximately 1Hz to 1kHz. The unit is in two configurations. An analog output version is available where the analog rates are passed directly to the interface connector. A digital version is also available with optional SpaceWire, custom low-voltage differential signaling, or RS-422 interface. With the digital output, the rate outputs are corrected for misalignment and temperature. Digital filters can also be added to provide a flat rate vs. frequency response.



The Dynapak 16 is designed to be a space-qualified sensing package. A model without radiation-hardened parts is also available at a substantially lower cost.

This product is subject to U.S. Government approval as required in accordance with the U.S. Government International Traffic in Arms (ITAR) Subchapter M, Title 22, Code of Federal Regulations, Parts 120 through 130 (22 CFR 120-130).

Specifications are subject to change without notice.

Custom Products

Custom sensing packages are available including scale factor, supply power, mechanical/mounting features, etc. Contact ATA with your custom angular jitter sensing requirements.



**Line of Sight Stabilization
in Optical Communications**



**Jitter Measurement/Compensation
in Imaging Satellites**



**Jitter Control/Rejection
in Directed Energy Systems**

Parameter	Specifications (Analog Output Configuration)*
Size	2.5W x 4.5L x 2.5H in
Weight	2.4 lbs.
Power Supply	± 5 VDC to ±18VDC
Power Dissipation	<1.5 W
Scale Factor	100 V/rad/s Custom available between 10-500 V/rad/s
Range	Dependent on power supply and scale factor
Bandwidth	1 to 1000 Hz -3dB points. See sample data
Noise Equivalent Angle	<50nrad rms (25nrad rms typical) 1-1000Hz
Sense Axis Misalignment	Physical misalignment <10mrad Axis calibration error <1mrad
Linear Vibe Sensitivity	<2 mrad/s/g (<.5 mrad/s/g typical)
Temperature	
Operating	-30°C to +80°C
Survival	-50°C to +90°C
Shock	SRS function 32g @ 100Hz, 1000g @ 1000-4000Hz, Q=10
Random Vibration	29 g rms



*Specifications subject to change without notice.

