

EARTH HORIZON SENSOR

Reliable horizon sensing for precise earth tracking

PYXIS SPACE is a young and innovative supplier for the small satellite sector, committed to the New Space philosophy of fast, cost-efficient, and reliable development. The company builds on more than 15 years of heritage in satellite technology and provides compact, high-performance solutions tailored to the needs of research institutes, universities, and commercial missions worldwide.

Our Earth Horizon Sensors are a practical enhancement for your attitude determination system. Featuring two wavelength ranges, they are optimized for nadir pointing during both sun and eclipse phases, ensuring reliable performance under all conditions. The sensors are engineered for volume production, high reliability, and excellent performance at a competitive cost.



FEATURES

- Dual band VIS and IR measurement
- Ideal for nadir tracking your ground segment
- Low power consumption
- Radiation-tolerant design based on space-proven components
- Easy electrical and mechanical integration with standard satellite platforms
- Cost-efficient production following New Space philosophy
- High-volume manufacturing and rapid delivery



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SPECIFICATIONS

Accuracy, rms	1°
Data Rate	1 Hz
Slew Rate	up to 2 °/s
FOV (HxV)	80° x 120° IR 92° x 114° VIS
Interface	CAN 2.0B
Power Supply	+4.5 V to +12 V
Power Consumption	200 mW
Mass	42 g
Dimensions	28 x 28 x 53 mm ³
Environment	-20 °C to +50 °C
Radiation	10 kRad

OPTIONS

- I2C or UART interface option
- Additional operating mode: sun sensor
- Image download
- EGSE software