SeaSpace AXYOM Antennas

Mission Telemetries in Real Time, Every Time.

Today.

SeaSpace Corporation
Real world. Real time.

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And Tomorrow.

Mission Telemetries in Real Time, Every Time.

Innovation for Maximum Tracking Performance

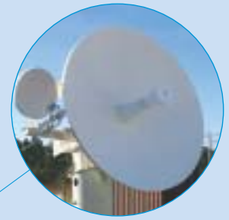
Precise, full-hemispherical tracking is the critical first step in communicating with LEO satellites. Yet, most existing designs fall short in one or more significant aspects. To overcome this, SeaSpace analyzed a multitude of conventional and unconventional designs and made an innovative leap to deliver high tracking accuracy.

AXYOM*: X-Y over Azimuth Optimized Motion

SeaSpace's AXYOM Antennas are a carefully crafted balance of complex competing factors: tracking dynamics, keyhole elimination, reliability, ease-of-installation, and cost.

Single channel monopulse and conical scanning autotrack feeds or economical program track feeds.

Dual-shaped, carbon composite reflectors in Cassegrain geometry with monopod supports result in high aperture efficiency.



AXYOM Control Systems Minimize Tracking Dynamics

The AXYOM ACU's embedded Linux computer provides a wide range of functions, including:

- Secure TCP/IP HTTPS communications
- Embedded SGP4 Orbital Model
- Integrated Scheduler, Status, Monitor & Control
- Integrated Fault Detection / Fault Isolation functions
- Pass Geometry Optimizer
- Embedded Tracking Receivers and Demodulators

A High-Performance/Low-Risk Solution for Every Mission

Whether your requirement is for a single component or a turnkey telemetry system, SeaSpace is unparalleled in our ability to support you within a complete engineering, manufacturing, and applications framework.

Dual bias drives on all three axes provide zero backlash and increased servo stiffness for maximum pointing and tracking accuracy.

The AXYOM Pedestal Provides Full Hemispherical Coverage

AXYOM was developed using a completely new design philosophy which provides maximized range of motion on three, X (180°), Y (105°) and Azimuth (540°), active axes. Our unique X-Y/AZ design enables the AXYOM ACU to determine the optimum tracking mode for each pass (X-Y or X/AZ) reducing the maximum tracking velocity requirement to less than 0.7°/sec and maximum acceleration requirement to less than 0.01°/sec² for almost all LEO satellites.

A unique X-Y/AZ configuration with all three axes intersecting at a single point resulting in optimized motion.

Our radomes deliver outstanding performance and high availability under all environmental conditions at any site around the globe.

*Patent applied for