Introducing the DataPath Stabilized Maritime Antenna System

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Achieving uninterrupted satellite communications at sea is complex and challenging.

The effect of wave action on sea-going vessels compounds the issues to acquire the satellite and create reliable, uninterrupted communications. A ship’s directional movement and speed is augmented by wave action, which introduce the motions of roll, pitch and yaw to the equation. Reliable satellite communications for naval vessels require a highly stabilized antenna and a control system to acquire, and stay locked on to a satellite.

The unique 4-axes gimbaled design in DataPath’s Ku-Band Maritime Antenna System uses technologically advanced motorized pedestals and control systems that automatically adjust a satellite communications terminal’s position for uninterrupted sea-borne communication.

DataPath’s new Maritime Antenna System is the latest addition to our successful SATCOM and Wireless portfolio.

The new Maritime Antenna System builds upon our modular and robust designs used in our land-based, rapid-deploy Q-Series antenna systems and the quick-deploy C-series terminals. The innovative 4-axes gimbaled Maritime Antenna System provides an accurate and long-lasting Ku-Band SATCOM solution that meets all the standards required for military use.

Fast Acquisition and Reliable Performance

DataPath’s 4-axes gimbal design is faster and stronger than conventional 3-axes center pole-based systems. AC servo motors on each axis, and use of a gradient satellite tracking method on all 4-axes allow the antenna terminal to lock on to a satellite within eight seconds from its parked position.

In addition, the servo motors on each axis are subjected to less torque which leads to lower stress on the mechanical rig which, in turn, translates to reduced maintenance costs and down time.

Superior Reflector Aids Precision

The standard carbon fiber reflector of the Prime Focus antenna supports a light-weight design for fast and precise movements. The antenna complies with Eutelsat requirements and provides such technical advantages as:

- High gain
- Low side lobes
- High cross-pol discrimination
- Up to 50W with internal BUC
- Up to 200 W with external BUC
- EIRP (with 50W BUC) 59 dBW
- Resistant to disturbance from other radio sources

The 4-axes gimbal design of the DataPath solution makes it faster, locking onto a satellite within 8 seconds, and stronger than conventional 3-axes center pole-based systems.
Remote Operation and Maintenance
DataPath Maritime Antenna Systems are designed for remote operation and maintenance. Features include:
• Real time supervision with access to performance statistics
• Remote management using SNMP
• Remote access control using SSH

Compliance to MIL Standards
DataPath’s Maritime Antenna System is tested and approved based on US military standard specifications for vibration, shock, and EMC according to MIL STD 810G and MIL STD 461F.

Why DataPath
At DataPath, our more than 25 years of experience in integrated communications and information technology has made us a market leader in trusted communications systems, services and end-to-end solutions for mission critical operations.

Whether for military, government or commercial applications, DataPath has the expertise, technology and customer-focused approach to meet the most demanding communication and information security requirements.

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DataPath’s maritime terminals are completely assembled, balanced and tested at the factory to support fast installation and deployment.

Strong, fast and reliable, the DataPath Maritime Antenna System is the latest addition to our successful SATCOM and Wireless portfolio.

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Always Locked On:
DataPath’s new Maritime Antenna Systems are built with a unique 4-axes gimbal technology to provide reliable SATCOM for naval vessels operating in harsh environments with virtually no loss of electromagnetic compatibility, radio performance or reliability.

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