

SpaceTrack 4500

World-Class Communications Anywhere in the World™

Designed to meet the communications requirements of stationary offshore assets, Harris CapRock's SpaceTrack 4500 fixed antennas are specifically engineered for production platforms and jackup rigs. The SpaceTrack 4500 range of antennas support both C and Ku-band coverage, delivering the most reliable communications for global operations.



BENEFITS

- > Simplified antenna pointing
- > Secure and reliable transmission
- > Cost-efficient, high-performance networks

Certifications and Approvals

CE certified

Brazil Anatel certified

Compliant with MIL-STD 167-1A vibration standard

Compliant with FCC 25.221 and FCC 25.222

Compliant with ITU and ETSI ESV specifications

Approved by Intelsat

Meets Eutelsat standards

FEATURES

- > Manual or motor-assisted antenna pointing
- > Quick and easy conversion between C and Ku-band footprints
- > Industrial-grade radome for protection in harsh environments
- > Radome air conditioning optional

Advanced Satellite Technology

The satellite technology used in the SpaceTrack 4500 antenna is based on the award-winning technology used in Harris CapRock's SpaceTrack 4000 stabilized antenna. Antenna pointing is required only one time and once installed and pointed, the antenna will lock on the appropriate satellite signal, guaranteeing continuous and reliable connectivity.

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Technical specifications

Antenna

4512K	1.2 m diameter, Ku band, symmetrical, prime focus		
	Tx 13.75 – 14.5 GHz	mid band gain	Tx ~43.0 dBi
	Rx 10.95 – 12.75 GHz	mid band gain	Rx ~41.2 dBi
		G/T (typical)	20.0 dB/k
4518K	1.8 m diameter, Ku band, symmetrical, prime focus		
	Tx 13.75 – 14.5 GHz	mid band gain	Tx ~45.5 dBi
	Rx 10.95 – 12.75 GHz	mid band gain	Rx ~44.2 dBi
		G/T (typical)	22.4 dB/k
4524K	2.4 m diameter, Ku band, symmetrical, prime focus		
	Tx 13.75 – 14.5 GHz	mid band gain	Tx ~50.1 dBi
	Rx 10.95 – 12.75 GHz	mid band gain	Rx ~47.7 dBi
		G/T (typical)	25.5 dB/k
4524C	2.4 m diameter, C band, symmetrical, prime focus		
	Tx 5850 – 6425 MHz	mid band gain	Tx~ 42.1 dBi
	Rx 3625 – 4200 MHz	mid band gain	Rx ~38.2 dBi
		G/T (typical)	18.5 dB/k

Environmental performance

Wind loading	
Max wind speed during operations	100 knots
Continuous operational	100 knots
Temperature	
Operational	-20 to +60 degC
Atmospheric conditions	Salt, pollutants, and contaminants as encountered in coastal and industrial areas

Antenna movements

Elevation range	-5° to +110°
Azimuth	Unlimited

Dimensions and weights

4512K	Radome size	1.8 m (H) x 1.8 m (D)	Antenna weight	170 Kg
4518K	Radome size	2.7 m (H) x 2.55 m (D)	Antenna weight	610 Kg
4524K	Radome size	3.75 m (H) x 3.6 m (D)	Antenna weight	710 Kg
4524C	Radome size	3.75 m (H) x 3.6 m (D)	Antenna weight	740 Kg

Application notes

4512K	Typical data rates ¹ : 9.6 – 512 Kbit/sec	Suitable for small jackups and platforms with space constraints Minimal equipment costs
Minimal equipment costs		
4518K	Typical data rates ¹ : 9.6 – 1024 Kbit/sec	Suitable for small to medium jackups and platforms Higher data rate
4524K	Typical data rates ¹ : 9.6 – 4096 Kbit/sec	Suitable for medium to large jackups and platforms Large antenna size supports highest potential bit rates while minimizing space segment costs
4524C	Typical data rates ¹ : 9.6 – 4096 Kbit/sec	Suitable for medium to large jackups and platforms C band operation provides higher reliability Linear or circular polarization options available

¹Actual data rates may vary depending on amplifier sizing