

SpaceTrack 4000

World-Class Communications Anywhere in the World™



Designed to meet the communications requirements of at-sea operations, Harris CapRock's SpaceTrack 4000 stabilized antennas are specifically engineered for offshore platforms, FPSOs, semisubmersibles and survey and seismic vessels. The SpaceTrack 4000 range of antennas support both C and Ku-band coverage, delivering the most reliable communications for global operations.

BENEFITS

- > Guaranteed pointing accuracy
- > Secure and reliable transmission
- > Cost-efficient, high-performance networks

Certifications and Approvals

CE certified

Brazil Anatel certified

Compliant with MIL-STD 167-1A

Compliant with FCC 25.221 and FCC 25.222

Compliant with ITU and ETSI ESV specifications

Approved by Intelsat

Meets Eutelsat standards

Meets MIL-STD901 and MIL-STD461 standards

FEATURES

- > Automatic satellite acquisition
- > Quick and easy conversion between C and Ku-band footprints
- > Supports standard GPS and Compass interfaces
- > Remote diagnostics and built-in tests
- > Radome air conditioning optional

Advanced Satellite Technology

The satellite technology used in SpaceTrack 4000 results in the optimum pointing of the antenna. This feature ensures that the signal is maintained despite conditions at sea and the location and direction of the vessel. Once the system is deployed, the antenna automatically locks on the appropriate signal, guaranteeing continuous and reliable transmission.

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SpaceTrack 4000 technology supports all types of seagoing vessels, resolving the challenges of geography and distance.



Technical specifications

Antenna

4012K	1.2 m diameter, Ku band, symmetrical, prime focus		
	Tx 13.75–14.5 GHz	Midband gain	Tx ~43.0 dBi
	Rx 10.95–12.75 GHz	Midband gain	Rx ~41.2 dBi
		G/T (typical)	20.0 dB/k
4012C	1.2 m diameter, C band, symmetrical, prime focus		
	Tx 5850–6425 MHz	Midband gain	Tx ~35.2 dBi
	Rx 3625–4200 MHz	Midband gain	Rx ~31.7 dBi
		G/T (typical)	11.5 dB/k
4018K	1.8 m diameter, Ku band, symmetrical, prime focus		
	Tx 13.75–14.5 GHz	Midband gain	Tx ~45.5 dBi
	Rx 10.95–12.75 GHz	Midband gain	Rx ~44.2 dBi
		G/T (typical)	22.4 dB/k
4024K	2.4 m diameter, Ku band, symmetrical, prime focus		
	Tx 13.75–14.5 GHz	Midband gain	Tx ~50.1 dBi
	Rx 10.95–12.75 GHz	Midband gain	Rx ~47.7 dBi
		G/T (typical)	25.5 dB/k
4024C	2.4 m diameter, C band, symmetrical, prime focus		
	Tx 5850–6425 MHz	Midband gain	Tx ~42.1 dBi
	Rx 3625–4200 MHz	Midband gain	Rx ~38.2 dBi
		G/T (typical)	18.5 dB/k

Pointing accuracy

For all systems	≤ 0.2° peak
Max. vessel motion roll/pitch/yaw	8°/sec

Antenna movements

Elevation range	–5° to +110°
Roll range	± 25°

Dimensions and weights

4012K	Radome size 1.8 m (H) x 1.8 m (D)	Antenna weight 230 kg
4012C Linear feed	Radome size 1.9 m (H) x 1.9 m (D)	Antenna weight 400 kg
4012C Circular feed	Radome size 2.7 m (H) x 2.55 m (D)	Antenna weight 400 kg
4018K	Radome size 2.7 m (H) x 2.55 m (D)	Antenna weight 450 kg
4024K	Radome size 3.75 m (H) x 3.6 m (D)	Antenna weight 750 kg
4024C	Radome size 3.75 m (H) x 3.6 m (D)	Antenna weight 750 kg

Application notes

4012K	Typical data rates [†] : 9.6–512 Kbit/sec	- Suitable for small vessels with space constraints - Minimal equipment costs - Rapid deployment version: SpaceTrack FR
4012C	Typical data rates [†] : 9.6–512 Kbit/sec	- Suitable for small vessels with space constraints - C-band operation provides global service options
4018K	Typical data rates [†] : 9.6–1024 Kbit/sec	- Suitable for small- to medium-sized vessels - Higher data rate
4024K	Typical data rates [†] : 9.6–4096 Kbit/sec	- Suitable for medium to large vessels - Large antenna size supports highest potential bit rates while minimizing space segment costs
4024C	Typical data rates [†] : 9.6–4096 Kbit/sec	- Suitable for medium to large vessels - C-band operation provides global service options - Linear or circular polarization options available

[†] Actual data rates may vary due to amplifier sizing