



NAUTI TVRO 120 Ku Band



TECHNICAL DETAILS

ANTENNA PARAMETERS:

Dish Diameter	1,40 m
Radome Diameter	1,20 m
Parabolic Dish	Single piece 1,20m carbon fiber
Above deck equipment	Mass 110 Kg
Type	Prime Focus, front fed configuration and feed with mode generator
Frequency band	Ku
Transmit frequency	13.75 GHz -14.50 GHz
Transmit gain	43 dBi (typical at 14.25 GHz)
Transmit	XPD >30 dB within the mainlobe -1 dB contour
Transmit beamwidth	+/- 0.64°
Receive frequency	10.70 GHz – 12.75 GHz

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Receive gain	41 dBi (typical at 11.7 GHz)
G/T	21.0 dB/°K (typical at 11.7 GHz)
Pointing losses	< 0.5 dB
Sidelobe patterns	compliant with EutelsatEESS502 for standard M
Polarization error	<0.1°
Worldwide Feed option	Yes

STABILIZATION:

Stabilization type	Active on three axis, with inertial reference and conical scan tracking
Motors Type	Brushless servomotors
Operation Angles	
Elevation	-30° + 120°
Tilt	+/- 30°
Azimuth	unlimited (with slip ring)

SHIP MOVEMENT

RMS pointing error 0.08° for the following ship maximum velocity and acceleration.

Roll	+/- 30° in 6 sec.
Pitch	+/- 30° in 6 sec.
Turning rate	up to 15°/s
Speed	up to 50 knots
Tracking accuracy	+/- 0,1°

RADOME

Type	two pieces, diam. 1,40m
Material	foam/fiberglass sandwich
Attenuation	No rain 0.2 dB

ENVIRONMENT

Above deck

Temperature	-20°C to +55°C
Humidity	up to 100% at +40°C
Spray and icing	Radome protected
Protection water	splash resistant from every direction
Rain	up to 100 mm/h
Wind	130 Knots
Corrosion metal part	hot dip galvanized; all components selected for marine usage
Vibration	Meets Inmarsat requirements

Below deck

Temperature	0°C to + 40°C
Humidity	Up to 100% R.H. at + 40°C
Power Requirement	220V, 50-60 Hz, 30W