Manufacturer: Thrane & Thrane A/S
Lundtoftegaardsvej 93 D
DK-2800 Kgs. Lyngby
DENMARK

Tel: + 45 39 55 88 00
Fax: + 45 39 55 88 88
mailto:info@thrane.com

Antenna model: SAILOR 900 VSAT 407009B-00500
and 407009E-00500

Antenna aperture dimensions: 1.03 m

Standard: M

Characterization date: 30-04-2013

Last update: 19-01-2017

System Description:
Stabilized maritime antenna – ring focus Gregorian configuration – Sandwich foam pre-preg layers radome. Three axis stabilization platform with conical RF tracking.
BUC 407009B-0500 NextGenWave 8W rating
407009E-0500 NextGenWave 20W rating
LNB Philtech
OMT Thrane & Thrane TT 60-131011

Models Characterized:
Standard configuration: linear orthogonal polarization with co-polarized or cross-polarized signal reception option.

Maximum Allowed EIRP:
For digital carriers transmitted at the satellite receive contour of 0 dB/K (EESS 502 refers):
39.8 dBW / 40 kHz for an orbital separation of the adjacent satellite > 2.5°
39.6 dBW / 40 kHz for an orbital separation of the adjacent satellite > 2.0°
35.6 dBW / 40 kHz for an orbital separation of the adjacent satellite > 1.5°

Tx Frequency: 13.75 – 14.50 GHz
Rx Frequency: 10.70-12.75 GHz

Tx Gain: 41.1dBi (typical at 14.25 GHz)
Rx Gain: 40.2 dBi (typical at 11.7 GHz)

Tx XPD: >30 dB within -1 dB contour
Rx XPD: >30 dB within -1 dB contour

G/T (measured with radome) 19.9 dB/K @ 12.75 GHz 30° Elevation

Remarks:
1-The manufacturer states that the RMS pointing error is less than 0.20° for the following ship motions:
   Roll = 30° in a period of 6 sec
   Pitch = 15° in a period of 4 sec
   Yaw = 10° in a period of 10 sec
2-The RF performance characterization was performed on one antenna unit with radome, at the France Telecom test range of La Turbie, France on the 18-20 April 2013.
3-Thrane & Thrane has inserted in the ACU software a look-up table with the polarization skew of the Eutelsat satellites, to protect against the mishandling of polarization skew values by installers.
4-The characterization’s validity is subject to regular submission of patterns to confirm that the system remains compliant with the Eutelsat standards.

Restrictions:
The use of Rx band 10.7 to 10.95 GHz may be subject to impairments because the isolation of the sidelobes at 3° from the boresight is less than 20 dB at 10.70 GHz (17.8 dB). Nevertheless these operations may be exceptionally authorized according to a valid Eutelsat transmission plan.