

# Characterization - Drive Away

Manufacturer:

Holkirk Communications Ltd Unit 17 Pulloxhill Business Park

Greenfield Road Bedfordshire United Kingdom MK45 5EU

Tel: +44 (0) 1525 721118 Fax: +44 (0) 1525 719734 Email bob@holkirk.com Web www.holkirk.com Antenna model:

RM150

Antenna aperture dimensions:

1.0111

Standard:

Characterization date:

01-03-2013

Validity period: See remark 5

#### System Description:

Antenna system based on Holkirk single piece 1.5 m Ku reflector with mode generator, for drive away applications.

#### Models Characterized:

Standard configuration: linear orthogonal polarization.

### Maximum Allowed EIRP:

For digital carriers transmitted at the satellite receive contour of 0 dB/K (EESS 502 refers):

45.1 dBW / 40 KHz for an orbital separation of the adjacent satellite  $\geq$  2.5° 41.6 dBW / 40 KHz for an orbital separation of the adjacent satellite  $\geq$  2.0° 40.6 dBW / 40 kHz for an orbital separation of the adjacent satellite  $\geq$  1.5°

Tx Frequency:

13.75 - 14.50 GHz

Tx Gain:

45.0 dBi (typical at 14.25 GHz)

Tx XPD:

>30 dB within -1 dB contour

Rx Frequency:

10.7-12.75 GHz

Rx Gain:

42.6 dBi (typical at 11.7 GHz)

Rx XPD:

>22 dB within -1 dB contour

G/T (typical)

21.5 dB/K @ 11.2 GHz

## Restrictions and remarks:

- 1 The authorization to operate the terminal is conditioned to the approval to access the Eutelsat S.A. Space Segment (ref. <a href="http://www.eutelsat.com/files/contributed/satellites/pdf/esog100.pdf">http://www.eutelsat.com/files/contributed/satellites/pdf/esog100.pdf</a> ESOG 110).
- 2 RF performance characterization was performed on one antenna unit at the CTS (Cobham Technical Services) test range in Leatherhead, UK, on the 3-4 October 2012.
- 3 Refer to next page for autopointing configuration details.
- 4 The RM 150 can be equipped with 1+1 combined HPA (400 Watt maximum).
- 5 The characterization's validity is subject to regular submission of patterns to confirm that the system remains compliant with the Eutelsat standard at the inspection date.
- 6 Any change to the characterised configuration needs to be notified to Eutelsat and may be subject to further tests.
- 7 The characterization is restricted to direct pointing mode using received DVB carriers.