

'NEWSWIFT' 1.5m DBS band Motorised Antenna

- The 'NewSwift 150DBS' motorised antenna system is a highly compact integrated satellite terminal designed for rapid deployment. Featuring a specially shaped offset fed antenna manufactured in carbon fibre, the 'NewSwift' unique design can also house a redundant/phase combined RF package, mounted within the antenna assembly.
- Rapid deployment
- Full 3 axis control, includes 360° azimuth range
- C, Ku, DBS and X band feeds available
- GPS based auto satellite acquisition package available
- 800 City database controller
- Tracking option with beacon receiver
- Fully remote controllable



Specification

Type

Offset fed

Diameter

150 centimetres

Configuration

Prime focus

Mount

Elevation over azimuth

Frequency

Port 1: Tx 17.3 to 18.1 GHz
(Optional 18.4 GHz)
Rx 10.95 to 12.75 GHz

Port 2: Rx 10.95 to 12.75 GHz

Gain

Tx: 47.2 dBi min. @ 17.8 GHz
(47.6 dBi typ.)

Rx: 43.2 dBi min. @ 10.95 GHz
(43.7 dBi typ.)

Off-axis gain

Tx: 23-25 log θ for $1 < \theta < 48^\circ$
-10 dBi for $48 < \theta < 180^\circ$
Rx: 26-25 log θ for $1 < \theta < 48^\circ$
-10 dBi for $48 < \theta < 180^\circ$

Polarisation type

Linear orthogonal

Cross polar isolation

> -35 dB rel. co-polar gain within -1 dB contour

Vswr

Tx: 1.3:1

Rx: 1.5:1

Port/port isolation

Tx / Rx: 40 dB (110 dB incl. filter)

Rx / Tx: 30 dB

Pointing stability

<0.5 dB

Waveguide flanges

Tx: WR 62 / R140 flanges

Rx: WR 62 / R140 flanges

Antenna position control

Full 3-axis motor control with manual override mechanism

Azimuth adjustment

360°

Elevation adjustment

6 to 91°

Polarisation adjustment

$\pm 90^\circ$

(with H/V waveguide switch)

Antenna control unit

Serial remote interface

'one touch' stow & deploy

fast / med / slow motor drive system

Simultaneous positional feedback of Az. /

El. / Pol. axes with true elevation reading

from calibrated inclinometer

Options

GPS based auto satellite acquisition package

H/V polarisation switch

X-axis waveguide kit

Rotary joint for azimuth axis

Transmit reject filter

3 port feed

4 port feed