SWE-DISH®
DRIVE-AWAY 150KM

The SWE DISH® 150KM Drive-Away is a unique concept for vehicle mount antenna systems. During transportation, you see an elegant looking car-box on top of a SUV or a Van. At site, the antenna deploys gracefully, and automatically points the antenna at the selected satellite. Within 10 min you are on the air, transmitting your DSNG contribution back to base - from a comfortable working environment free of HPA generated noise and heat.

APPLICATIONS

The SWE-DISH 150K Drive-Away system is your choice for vehicle mount Ku band high data-rate and high power DSNG applications, from anywhere. Lower datarate/power applications are also common: Commercial & military satcom from remote sites - also at military X band, with Step Tracking.

INTEGRATION CAPABILITIES

The rooftop integration capabilities are unsurpassed – anything from a 16W transceiver, 2 x 50W SSPA to the really high power configuration – phase combined 400W TWTA's plus an integrated AirCon unit - beaming up to 72 dBW EIRP towards the bird.

CAPABLE ANTENNA

The high performance elliptical 1.5 m Gregorian offset antenna is of course the heart of the 150KM Drive-Away – the dual optics and accurate reflector surfaces (carbon composite) provide exceptional low sidelobes and good cross-polar performance. The antenna mount is a large diameter turntable, totally backlash free in both elevation and azimuth.

EASE OF USE

Operation is extremely easy if the GPS / Flux option is fitted - get to the site, jacks down, press 'Deploy' on the full featured SWE-DISH ACU300 keyboard, select 'Satellite' and press 'Locate'. Lean back and watch the antenna peak up on the selected satellite – maybe via the pod-mounted video camera/spotlight.

The proven Easy Control & Monitoring (ECM) unit helps the not-so-well-trained operator to configure the system – set up the MPEG2 encoder, configure the modulator, select pre-set frequency and power level – followed by step-by-step support during line up towards the satellite.

TRUCKS & VANS

Wide ranges of fully integrated vehicle solutions are available for the world market. We will transform the vehicle into a high quality environmentally conditioned working environment for simple transmission purposes or combined with multi-camera facilities with on-board editing and playout for outside broadcast operations.

All vehicles are internally lined and insulated and fitted with racking, lighting, AC & DC power systems and options for power generators, stabilisers, air-conditioning, heating and external interfaces.

KEY FEATURES

- Fits any SUV or Van, for elegance, comfort and low drag
- All equipment is totally incapsuled during transportation
- Wide choice of configurations – automatic antenna alignment with GPS/Flux, step tracking, single thread, redundant, phase combined HPA´s, integrated AirCon system and de-icing
- High EIRP operation thanks to exceptional antenna performance
- Easy and cost effective vehicle integration. The load is spread over the vehicle roof - no need for expensive internal reinforcements
- Granted FCC license, Intelsat/ Eutelsat type compliant, ETSI/CTR 030 approved

SPECIFICATIONS: SWE-DISH® DRIVE-AWAY 150KM

ANTENNA PERFORMANCE

Antenna model no	150K EDD
Antenna concept	Gregorian dual offset antenna, 1.5m elliptical main reflector, folding feedarm with fixed subreflector
Feed system	2 port linear polarisation, 3 port optional
Receive frequency	10.7 - 12.75 GHz
Receive gain	43.2 dBi at 11.7 GHz
Antenna noise temp	23K at 20° elevation
G/T with 75K LNB	23 dB/K at 20° elevation
Transmit frequency	13.75 – 14.50 GHz, optional 12.75 – 14.5 GHz and DBS band
Transmit gain	45.0 dBi at 14.25 GHz
Crosspolar rejection	> 35 dB
EIRP capability	66 dBW with single thread 150W HPA, 72 dBW with phase combined 400W HPA

ANTENNA DRIVES AND TRAVEL RANGES

Azimuth range	Up to +/- 183°
Azimuth travel rate	High speed: 3°/sec Slow speed: 0.3°/sec, adjustable
Elevation range	5° to 90° continuous, depending on installed azimuth range
Elevation travel rate	High speed: 3°/sec; Slow speed: 0.3°/sec, adjustable;
Polarisation range	+/- 100° skew range, <1° accuracy, motor driven
Deployment and stow	Automatic, by command from Antenna Control Unit ACU3000
Antenna pointing	Automatic with GPS/Flux option, manual jog
Antenna sensors	True Elevation Inclinometer in elevation, multiturn sensor in azimuth. Antenna position displayed on ACU
Back up system	Car battery powered Control Box for motors or manually on drive shafts

ENVIRONMENTAL SPECIFICATION

Operational wind speed	≈ 25 m/s, gusts to ≈ 30 m/s
Survival wind speed	≈ 36 m/s
Survival wind speed,	≈ 200 km/h stowed
Optional de-icing	Complete antenna as well as pod floor
Ambient temperature	Operational – 20° to + 55°C, survival – 40° to +60°C
Rain	Operational and survival in heavy rainstorms
Relative humidity	0% to 100% with condensation
Solar radiation	1000 W/m2
Radial ice, survival	2.5 cm on all surfaces
Corrosive atmosphere	As encountered in coastal regions or heavy industrialised areas

DSNG/DATACOM SYSTEM CAPABILITIES

Audio/Video inputs & processing support all industry standards (DVB/HDTV)

QPSK/8-PSK modulation, SCPC or MCPC, data rates 1.4 to 60 Mbps

All commonly used coding types and rates are implemented

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