

DA-180 LITE ANTENNA



FEATURES

- ON AIR IN LESS THAN 10 MINUTES
- NO TOOLS REQUIRED
- MULTI-BAND FEEDS CHANGED IN MINUTES
- INTELSAT/EUTELSAT COMPLIANT FOR COMMERCIAL BANDS
- COMPLETE INTEGRATED SYSTEMS AVAILABLE
- <132kgs
- MIL-STD-810F CERTIFIED

LIGHTWEIGHT 1.8m MOTORISED ANTENNA FOR INSTALLATION ON ANY VEHICLE

The DA-180 Lite is a very cost effective lightweight antenna suitable for mounting on virtually any vehicle.

With a total weight of only 132kgs, including Ku-band antenna feed, the DA-180 Lite can be installed in minutes.

The DA-180 Lite, in all bands, comfortably meets or exceeds the published regulations of known commercial and military satellite authorities including Intelsat and Eutelsat, with sidelobe performance better than 29-25 log θ and cross polar discrimination better than 35dB.

Transmission efficiency is further enhanced by the load supporting feed arm design which can carry a pair of BUCs.

With all the HPA power going to the antenna feed rather than being lost through cross axis waveguide and rotary joints the DA-180 Lite offers the potential of higher EIRP and/or smaller amplifiers than needed with comparable products.

The DA-180 Lite features GigaSat's motorisation system, as standard but as with all GigaSat antenna products, manual override is available in the unlikely event that there is a system failure.

With integral compass, inclinometer and GPS the DA-180 Lite will point at a calculated geostationary satellite position within a matter of seconds and with optional beacon receiver can peak and track with no further manual intervention.

The DA-180 Lite is MIL-STD-810F certified.

SPECIFICATIONS

| General | |
|------------------------|--|
| Antenna Type | Elliptical |
| Diameter | 1.8m |
| Configuration | Offset |
| Polarisation | Linear, orthogonal transmit & receive. (Optional circular left & right) |
| Cross Polarisation | -35dB within the -1dB co-polar contour (linear) |
| Port-to-Port Isolation | 40dB (Linear) |

| Transmit | | |
|------------------------|---|--|
| Transmit Bands | DA-180L/60 DA-180L/70 DA-180L/140 DA-180L/180 DA-180L/300 | 5.85 to 7.025GHz 7.9 to 8.4GHz 12.75 to 14.5GHz 17.3 to 18.4GHz 27.5 to 31GHz |
| 3dB Beamwidth | <2.0° at 5.85GHz | |
| Transmit Power | 1kW max. | |
| Off Axis Transmit Gain | <29-25 logθ dBi | |
| VSWR | 1.3:1 | |
| Transmit Gain | DA-180L/60 DA-180L/70 DA-180L/140 DA-180L/180 DA-180L/300 | 39.5dBi mid-band 41.8dBi mid-band 46.7dBi mid-band 48.7dBi mid-band 53.0dBi mid-band |

| Receive | | |
|---------------|---|--|
| Receive Bands | DA-180L/60 DA-180L/70 DA-180L/140 DA-180L/180 DA-180L/300 | 3.4 to 4.2GHz 7.25 to 7.75GHz 10.7 to 12.75GHz 10.7 to 12.75GHz 17.7 to 22.2GHz |
| Receive Gain | DA-180L/60 DA-180L/70 DA-180L/140 DA-180L/180 DA-180L/300 | 35.2dBi mid-band 41.1dBi mid-band 45.0dBi mid-band 45.0dBi mid-band 49.4dBi mid-band |

| Power | |
|-------------------|---|
| Power Requirement | 90 to 264V AC Power Supply +24VDC (option) |

| Environmental | |
|---------------|---|
| Temperature | -40 to +70°C - Transportation & Storage -20 to +60°C - Operational (Optional Heating Systems) |
| Humidity | 100% |
| Altitude | 4,500m |
| Wind Rating | Operational 60km/h with gusts to 72km/h Survival 130km/h (stowed) |

| Physical | |
|-------------------------|--|
| Elevation Adjustment | 0 to 90° |
| Azimuth Adjustment | +/-180° |
| Polarisation Adjustment | +/- 90° |
| Size | 2.42m x 1.83m x 0.56m |
| Weight | 132kgs Weight above is for a baseline configuration |



DA-180 Lite



making a difference

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