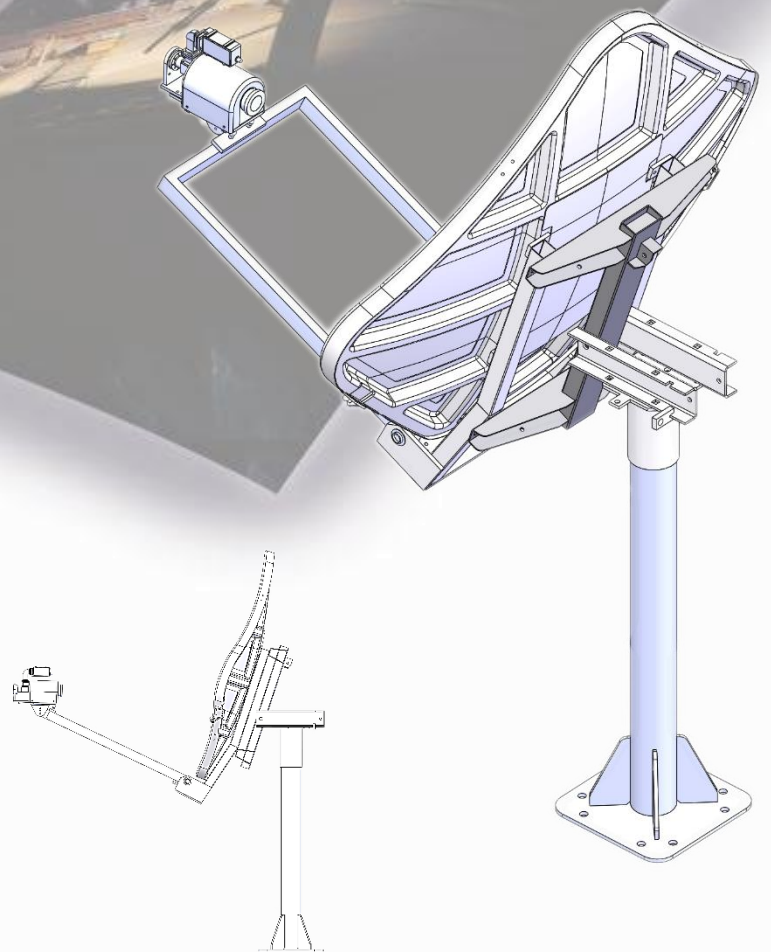




## SKA12FD Ka-Band 1.2 m Fixed Diamond Antenna

- Diamond-shape offset carbon fiber reflector
- Robust
- High performance
- Powerful
- Efficient
- Designed for X, Ku, DBS, and Ka Band uplink



**Rx Frequency**  
19.2 to 21.2 GHz

**Tx Frequency**  
29 to 31 GHz

**Diameter**  
1.2 meters

**Feeder**  
4 ports (TX RHCP / RX LHCP and TX LHCP / RX RHCP)

**Axial Ratio RX and TX**  
1 dB max

**Antenna Optics**  
One-piece offset feed prime focus

**Mount Type**  
Elevation over Azimuth

**Elevation Adjustment Range**  
0° - 90° Continuous Fine Adjustment

**Wind Loading**  
72 kmph operational, 200 kmph survival

**Temperature**  
-50° to +80°C

**Humidity**  
0 to 100% (condensing)

**Side Lobes:**

100 $\lambda/D < q < 20^\circ$	..... 29-25 log $\theta$ dBi
20° < q < 26.3°	..... -3.5 dBi
26.3° < q < 48°	..... 32-25 log $\theta$ dBi
48° < q < 180°	..... 10 dBi

G/T equal or greater than 23 dB/K

**Rx Gain:**

19.2 GHz	45.4 dBi
20.2 GHz	45.7 dBi
20.7 GHz	46.1 dBi
21.2 GHz	46.2 dBi

**Tx Gain:**

29 GHz	49.6 dBi
30 GHz	50.0 dBi
30.5 GHz	50.0 dBi
31 GHz	50.3 dBi

Compliant with Isolation TX/Rx according to MIL-STD-188-164B (4.2.15)