



12M Ka-band antenna with head turning type

| Electrical Specification | | |
|---|--|-----------------|
| Type | 12m Ka-band | |
| Frequency band | Receive | Transmit |
| | 17.7-21.2 | 27.5-31.0 |
| Gain, Mid-band, dBi | 65.4+20lg(F/20) | 68.5+20lg(F/30) |
| VSWR | 1.3:1 | 1.3:1 |
| Noise Temperature(K) | 4 port | |
| 20° EL | ≤130 | |
| Power Capacity | | 500W(each port) |
| Interface type | WR-42 | WR-34 |
| Polarization type | Circular Pol. | |
| Feed Insertion Loss(dB) | ≤0.8° | ≤0.8° |
| Port Isolation(dB): Rx-Tx | ≥85 | |
| Circular Pol. Tx-Tx, Rx/Rx | ≥20 | ≥20 |
| Axis ratio(dB) | ≤0.5° (on axis) | ≤0.5° (on axis) |
| First Sidelobe (dB) | ≤-14 | ≤-14 |
| Sidelobe envelope (more than 90% sidelobe envelope meet the requirement of this sidelobe envelope) | 29-25lg(θ)dBi 1°≤θ≤20° -3.5dBi 20°<θ≤26.3° 32-25lg(θ)dBi 26.3°<θ≤48° -10dBi θ>48° | |
| Mechanical Specification | | |
| Az travel range | ±90° | continuous |
| El travel range | 5° -90° | continuous |
| Surface Accuracy | ≤0.3mm (R. M. S) | |
| Weight | 24600kg | |
| Servo Control Specification | | |
| Az speed | 0.001° /s~1° /s | Dual DC motors |
| El speed | 0.001° /s~1° /s | DC ball-screw |
| Operational mode | Manual control speed, manual control position, preset satellite position, step tracking, | |



| | | |
|----------------------------------|---|-----------------------------|
| | mono-pulse tracking | |
| Display resolution | 0.001° option | |
| Tracking accuracy | 1/10~1/15 beam width | |
| Servo power consumption | 3kw/380V 0.5kw/220V | |
| Environment Specification | | |
| Wind Speed | Guaranteed accuracy wind operation 20.8m/s Degraded accuracy wind operation 28.4/s | |
| Stow wind speed | 35m/s | |
| Not destroyed wind speed | 55m/s | Antenna locking towards sky |
| Temperature | -40℃~60℃ (Outdoor) -20℃~55℃ (Indoor) | |
| Humidity | 0%~100% | |
| Earthquake (Survival) | 0.3G' s (Horizon) 0.15G' s (Vertical) | |
| Solar Radiation | 360BTU/h/ft ² | |
| Ice | 3 cm | |