

Monitoring Diameter 13 M Multi-Band Antenna System for Satellite

Model No. 13M-MO-SAT



Options

- Operational Band
 - L, S, C, X, Ku and Ka Band Antenna System
- 6 Band Feed Select Switching
- Deicing Systems (Heating)
- LNA , D/C System Integration
- Tracking Antenna System
(Step, Monopulse, Memory, or Manual track)
- Turnkey Installation and Testing
- Packing for Sea and Air Transport
- Full Motion or Limit Motion
- Extended Azimuth Travel Range

Electrical Specifications

Electrical	L-Band	S-Band	C-Band	X-Band	Ku-Band	Ka-Band
Item	Receive	Receive	Receive	Receive	Receive	Receive
Frequency(GHz)	1.425 ~1.800	2.10 ~ 2.70	3.40 ~ 4.80	7.25 ~ 7.75	10.70 ~ 12.75	17.70 ~ 21.20
Gain(Mid;dBi)	44.23 (at 1.65 GHz)	48.12 (at 2.40 GHz)	52.89 (at 4.0 GHz)	57.42 (at 7.25 GHz)	60.13 (at 11.70 GHz)	64.60 (at 20 GHz)
Typical G/T (20° EL)	22.8 dB/K (43 K LNA)	26.4 dB/K (40 K LNA)	33.9 dB/K (40 K LNA)	36.45 dB/K (60 K LNA)	39.1 dB/K (80 K LNA)	33.9 dB/K (120 K LNA)
Beam Width(3dB)	1.0 °	0.7 °	0.4 °	0.2 °	0.1 °	0.1 °
VSWR	1.3	1.3	1.3	1.3	1.3	1.3
Axial Ratio	2.0 dB	2.0 dB	1.75 dB	1.0 dB	0.8 dB	0.8 dB
Cross Polarization Isolation	CP or LP	CP or LP	CP or LP	CP or LP	CP or LP	CP or LP
Port to Port Isolation						
Rx to Rx	35 dB	35 dB	35 dB	35 dB	35 dB	35 dB
TxtoTx	•	•	•	•	•	•
Txto Rx	•	•	•	•	•	•
RxtoTx	•	•	•	•	•	•
Side lobe Performance	32-25log θ	32-25log θ	32-25log θ	32-25log θ	32-25log θ	32-25log θ
Max Power	Rx only	Rx only	Rx only	Rx only	Rx only	Rx only
RF Specification	H6B10	H6B10	H6B10	H6B10	H6B10	H6B10

※ All feed flange values G/T 20° elevation dry clear weather 18° C temperature no RF interference structure building wood land mountain front area

Monitoring Diameter 13 M Multi-Band Antenna System for Satellite

Mechanical Specifications

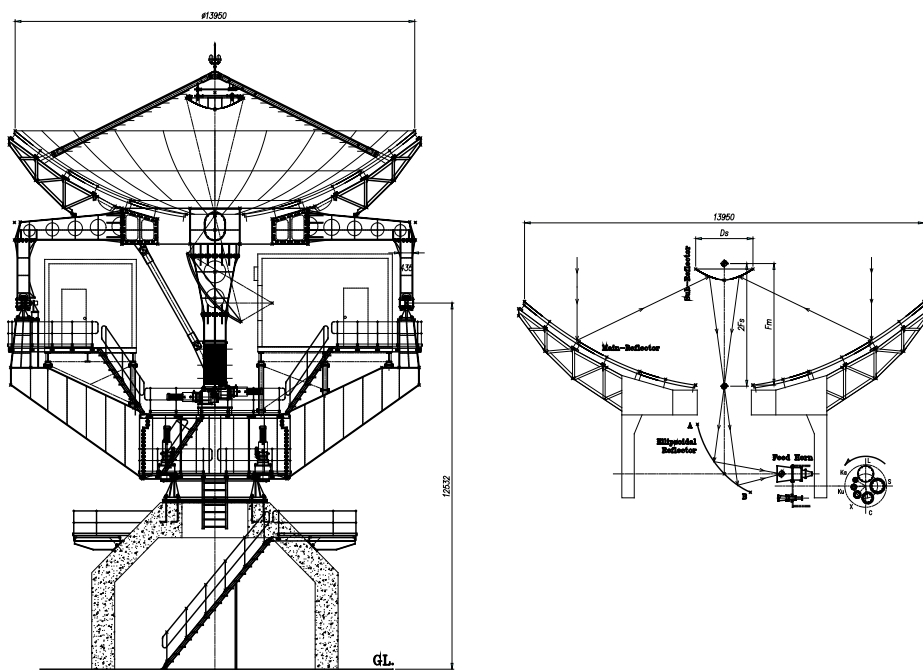
Antenna Diameter	13 M Dual Shaped Surface Reflector Type
Antenna Type	Yoke & Tower Pedestal
Reflector	Shaping formed aluminum panels, galvanized steel back-up structure
Pedestal Configuration	Elevation over azimuth pedestal, constructed of galvanized steel
Azimuth Travel	Full Motion±270°(Yoke & Tower Type)
Elevation Travel	5 to 90° continuous
Azimuth Travel Rate	0.02°/sec,slewrate 5.0°/sec
Elevation Travel Rate	0.02°/sec,slewrate 2.5°/sec
Foundation (L x W x D)	9 x 9 x 0.6 m
Shipping Containers	six 40 ft open top, five 40ft standard, two 40 ft flattruck
Soil Bearing Pressure	15,000 kg/m ²
Net Weight	70 ton

Environmental Specifications

Survival Wind Loading	200 km/h
Operational Wind Loading	72 km/h, gusting to 97 km/h
Operational Temperature	-20° to +50°C
Survival Temperature	-30° to +60°C
Rain	up to 100 mm/h
Relative Humidity	0 ~ 100 %
Solar Radiation	1000 kcal/h/m ²
Ice (Survival)	2.5 cm on all surfaces or 1.3 cm on all surfaces with 130 km/h wind gusts
Shock and Vibration	As encountered during shipment by airplane, ship or truck
Atmospheric Conditions	As encountered in coastal regions and/or heavily industrialized areas

※ Without active elements and components.

Antenna Drawing (unit : mm)



Front View