

2.4 Meter KU-Band OEM Antenna



The Level421 OEM 2.4 Meter KU-Band Satellite Antenna **TT-40240** is a dual reflector ring focus design (step up from the 1980's technology of Gregorian) type. The antenna diameter is 2.4 meter, and the antenna mount is mono-post style. The main and sub-reflectors of the antenna are shaped to achieve good performance with high efficiency and low sidelobes. The antenna mount is a combination of upright-post and triangular-plate at the bottom structure, the antenna is relatively easy to point to the satellite and has strong and robust wind resistant characteristics. The components of the antenna are interchangeable and convenient to install and maintain.

The performance of this antenna meets the CCIR-580 standards relevant to satellite earth stations, and it has obtained the network access type approval certifications from APT satellite holdings limited, AsiaSat, China broadcast Sat, SinoSat, OrientSat since the beginning of 1999.

Specifications

Electrical

Parameter	Receive	Transmit
Frequency	10.95 – 12.75	14.00 – 14.50
Gain	47.5	49.0
VSWR	1.25:1	1.25:1
Beam width – 3 dB	0.48°	0.34°
Beam width 15 dB	0.97°	0.68°
Cross polarization isolation (on axis)	35db	35db
Within 1db contour	>30db	>30db
Port to port isolation (Tx-Rx with filter)	85db	
Noise temperature	2-Port Feed	
10° EI	52K	
20° EI	44K	
40° EI	38K	
Power Capacity		1000W
Interface	WR-75	
Feed insertion loss	0.40dB	0.40dB

Mechanical

Main reflector diameter	D=2.4m
Azimuth angle	±60°
Elevation angle	5° ~ 90°
Surface accuracy	0.5mm (r.m.s.)
Net weight of the antenna	280 kg
Painting	white

Environmental Characteristics

Operation wind speed	72km/h – 97km/h
Survival wind speed	200km/h
Humidity	0% ~ 100%
Temperature	-30°C ~ +60°C
Earthquake	Horizontal: 0.3G's; Vertical: 0.15G's

Dimensions

Antenna System	Qty	Total Weight	Dimensions
Reflector	8 pieces	280 kg	1500x800x1400mm
Reflector Beam	8 pieces		
Hub	1 piece		
Sub-reflector	1 piece		

Sub-reflector bearing rod	4 pieces		
Feed source system	1 piece		
OMT	1 piece		
Feed source sleeve	1 piece		
Pedestal	1 piece		
Azimuth drive	1 piece		
Elevation drive	1 piece		
Azimuth/elevation drive pole	1 piece		
Fastener	1 piece		
Foot bolt	4 pieces		