Micro Deployable X/Y Leo Tracking Antenna

Space & Component Technology | **Micro Deployable X/Y**

The Micro Deployable X/Y Leo Tracking Antenna pedestal technology is specifically designed for quick-deployment LEO satellite tracking applications for short-term and permanent use. Designed around our proven X/Y technology precision antenna systems, this solution can be transported on a commercial airline and can be setup by one or two individuals in less than 30-minutes without special equipment.

With a flexible system configuration, low power consumption and high reliability, the Deployable X/Y Tracking Antenna includes Ethernet (TCP/ IP) remote control for monitoring and control based on a Linux operating system. Additional features include a TLE-based program track satellite scheduler, precision petal carbon composite reflectors, and single and multi-band frequencies from L-band to Q-band.

The Deployable X/Y Tracking Antenna includes a GPS system which provides precision time and terminal position. Comtech Space & Component Technology offers a range of fixed, transportable and deployable configurations from 30 centimeter to 60 centimeters.

System Highlights

- X/Y axis drive configuration ensures full hemispheric coverage
- No ‘cone of silence’ at zenith
- Slew rates >4 degrees per second, both axis simultaneously (actual tracking speed required for LEO operations is less than 1-degree per second on either axies)
- Pointing accuracy better than 0.1 degree (Program Track), TLE dependant…
- Acceleration less than 0.001 to >10 degrees per second per second
- Both axes are controlled simultaneously
- Inbuilt safety features for protection of both equipment and personnel
- No cable wrap or need for rotating joints
- Highly reliable and very low in-service costs
- Excellent heritage
- Low power consumption
- Very low tracking dynamic required even through keyhole
- Designed for minimum 15-year life
- Simple low to no maintenance required
- Highly cost-effective tracking solution

Specifications

Available Options:

- Multi-Frequency Feeds
- LHC/RHC Polarizations
- High Performance LNAs and LNBs
- Ancillary Equipment:
  - Frequency Converters
  - Spectrum Analyzers
  - RF Switching
  - Demodulators/Modems
  - HPA

Mechanical	
Antenna Mount	Micro X/Y, with folding legs
Pointing Accuracy	<0.1°
Position Step Resolution	0.00004°
Acceleration	10°/s² max
Velocity	4°/s typical
Degrees of Freedom	2 (X and Y)
Axis Travel	Full hemispheric coverage
Horizon Limits	0° typical
Antenna Aperture Size	30cm – 60cm, weight 20kg to 25kg
Control System	
Interface	Ethernet
Power	110/240VAC, 1ph, 15A 50-60Hz; 100W to 1KW
Operating System	Linux
RF	
Frequency Range	L-band through Q-band
Polarization	LHCP and/or RHCP
Feed Configuration	Prime Focus
Environmental	
Wind Speed	Operational: 56 km/hr (35 mph) Survival: 96 km/hr (60 mph)
Temperature	-10°C - +50°C (14 F - +122 F) Operational -40°C - +70°C (-40 F - +158 F) Survivable
Humidity	100% Relative Humidity
Driving Rain	Up to 10 cm/hr (4 in/hr)

About Comtech

Comtech Telecommunications Corp. (Nasdaq: CMTL) designs, develops, produces and markets innovative products, systems and services for advanced communications solutions. The Company sells products to a diverse customer base in the global commercial and government communications markets. For more information visit www.comtechtel.com.

Contact

Space & Component Technology

6181 Chip Ave.
Cypress, CA 90630 USA

624 Krona Drive, Suite 170
Plano, TX 75074

Toll Free: 1.866.264.0793
www.trackmysat.com
www.comtech-mct.com/products/mct/space-and-component-technology/ground-systems