PROFEN XY Tracking Antenna Solutions



PROFEN's XY series pedestals are suitable for integrating 1.8-7.5 meters dish antennas and are ideal for use in LEO, MEO and GEO applications. The unique design of the pedestal eliminates the overhead keyhole problem encountered in conventional three-axis AZ/EL/POL systems.

The XY pedestal design has been developed for safety, reliability, and adaptability. It has a universal flange that allows integration of reflectors of various sizes such as parabolic or off-set reflectors and operation in any frequency band from L-Band to Ka-Band.

The pedestal comes with specially designed ACU system that can operate in a variety of satellite tracking modes including Step Track, TLE-based program tracking, Time & Coordinate based program track and Mono pulse tracking.

The ACU comes with the Outdoor Drive Unit (ODU), which houses most of the pedestal electronics such as power supplies, servos, and optionally the Indoor Control Unit (ICU), which has LEDs and Display to indicate and control the operation of the pedestal. The ICU is normally located in a system room, but can also be supplied with an outdoor IP rated enclosure designed for all environmental conditions.

Key Features

- Suitable with dish antennas both parabolic and offset from 1.2 m to 7.5m,
- Support frequency bands L, S, C, X, Ku, K, and Ka,
- Dynamic satellite tracking and accurate pointing,
- Backlash free drive system and safety interlock,
- Can be delivered with or without dish.

Typical Applications

- Earth Observation and Imaging
- Remote Sensing
- Satellite Communication
- TT&C
- Ground terminal for UAV satcom

PROFEN XY Tracking Antenna Solutions Specification*

Mechanical					
Model	250	350	450	550	750
Aperture Size	1.8—2.5m	3-4m	4-5m	5-6m	6-7m
Pointing Accuracy	<0.1°				
Position Step Resolution	0.05°				
Acceleration	5°/s2 max				
Velocity	5°/s typical				
Movement	Diagonal in X and Y simultaneously				
Axis Travel	Full hemispheric coverage				
Horizon limits	-2° typical				
Control System					
Interface	Ethernet (RS485 optional)				
Power	240VAC 1ph or 380VAC 3ph, 50Hz, 10-60A				
Application Frequency Bands					
Frequency Range	L, S, X, C, Ku and Ka Band				
Polarization	LHCP and/or RHCP, Linear				
Environmental					
Wind Speed	80 km/h wind (Operational)				
		200 k	m/h wind (Sur	rvival)	
Temperature	-40°C-+60°C (Operational)				
	$-40^{\circ}C - +70^{\circ}C$ (Survival)				
Humidity	100% Relative Humidity				

*Specifications is subject to change without notice







