

Kinematics KX-6™

Commercially Developed, Aerospace Capable

Kinematics understands the unique needs of a satellite antenna positioner and offers products designed for the satellite communications industry. The KX-6 is a complete X/Y positioner solution supplied with encoders, servo motors, and planetary reducers to make a complete positioner. This product is factory-assembled, offering our customers a drop-in solution for precise positioning.



Optimized for LEO Orbits

Optimized for 2.4m class reflectors tracking LEO constellations, this complete X-Y positioner is engineered to track high-density LEO orbits with fast slewing at up to 16 degrees per second in short bursts to accurately lock onto the next satellite, minimizing the required number of ground stations.

Ready-to-Integrate

The KX-6 Positioner comes ready to integrate and is an easy drop-in solution. The X-Y configuration is well suited for today's demanding LEO constellations, avoiding the difficulty with overhead passes common to other configurations. It is suitable for reflectors from 1.5m to 3m. It can be customized to meet your requirements.

Performance and Value

Kinematics manufactures and integrates the KX-6 in our factory, greatly reducing the costs associated with sourcing and assembling components from multiple vendors, sales, and customer support. Since 1996 we have been delivering reliable, innovative products.

Custom Engineered

The KX-6 is a custom engineered solution for parabolic tracking antennas. Remove schedule risk and costs by allowing us to provide an integrated solution. Our engineers are on standby to configure your KX-6 with custom mounting solutions as well as options for motors and encoders to meet your requirements.

Parameter	Value	Result
Configuration	X/Y	Avoids overhead keyhole
Axis Speed	16 ° / s	Max Speed for fast retrace, typically in under 10 seconds
Axis Acceleration	10 ° / s ²	
Axis Nominal Torque	1,500 Nm	
Axis Max Torque	3,000 Nm	
Backwards Holding Torque Max	5,000 Nm	Static holding rating
Axis Backlash	0.00 to 0.03°	accomplished by dual drive bias control of backlash
Encoder Resolution	19 bit	High accuracy option, configurable for customer