

TRAILER BASED TRACKING SYSTEMS

Kennedy Space Center (KSC) Test Bed for sensor evaluation. High-performance trailer-mounted tracking system for Space Shuttle launch and landing operations, and Delta and Atlas launch operations.



PEDESTAL CHARACTERISTICS:

CHARACTERISTICS	<u>AZIMUTH</u>	<u>ELEVATION</u>
MOTOR (direct drive)	1200 Watts (peak)	1200 Watts (peak)
GEAR RATIO (direct drive)	1:1	1:1
PEAK TORQUE	150 ft-lb	150 ft-lb
RATED CONTINUOUS TORQUE	100 ft-lb	100 ft-lb

BACKLASH (Direct drive) 0° 0°

ANGULAR TRAVEL ±180° -20° to +90°

MAXIMUM VELOCITY 150°/sec 150°/sec

MINIMUM VELOCITY 0.004°/sec 0.004°/sec

MAXIMUM ACCELERATION* 150°/sec² 250°/sec²

(w/ 30 slug-ft² load inertia)

DATA PACKAGE (21 bit absolute encoder) (0.0002°/bit) (0.0002°/bit)

LIMIT SWITCH Primary & Secondary Primary & Secondary

POWER INPUT 65 VDC, up to 30 amps cont. and 40 amps peak

ORTHOGONALITY 0.0042° (15 arc seconds)

WEIGHT 950 lbs (est.)

TEMPERATURE -40°C to +130°C Operational

-60°C to +150°C Non-operational

SERVO CONTROLLER CHARACTERISTICS:

LOCAL DISPLAYS Power ON/Interlock Indicator

REMOTE CONTROLS Ethernet, UDP/IP

Controls Position Mode, Velocity Mode, Analog Velocity Mode, Standby

Mode, Servo On/Off, Position Offset, Max Position Velocity, Max

Acceleration.

Feedback Position, Position Offset, System Status (Interlock, Servo mode,

Servo On/Off, Servo Status), Max Position Velocity, Max

Acceleration.

INPUT DATA FORMATS Ethernet and Serial Digital Interface

DATA OUTPUT FORMATS Ethernet and Serial Digital Interface

SERVO DRIVE OUTPUT 340 Volts DC

INPUT POWER 240 VAC, 50/60 Hz, 20 Amps

SIZE 19-in W x 10.5-in H RETMA Chassis

WEIGHT 60 lbs (est)

