

AC2000D antenna Control system(DC Control System)



General Description:

AC2000-D ACS adopt DSP technology, including antenna position detection and DC servo motor, PWM is for DC motor speed adjusting and IPM. It adopts multi-circuit hi-speed digital processor, fully digital control from the antenna position detection and control to double DC motor drive away gap. Motor control mode is for pulse width modulation (PWM) dc speed, power amplifier main loop is using intelligent power module (IPM).

Main Function:

- ◆ Azimuth, Elevation DC motor backlash
- ◆ Azimuth, Elevation position testing & control
- ◆ Storage of 12 satellite antenna position
- ◆ Calculating satellite antenna position according to the longitude
- ◆ soft limit, switch prelimit, eventual 3 limit switches space protection
- ◆ Elevation collection locking control
- ◆ Fault diagnosis and interlock protection, display, alarm and records
- ◆ Real-time serial communication

Modes of Operation

- *Manual
- *Manual control speed
- *Preset position
- *Preset satellite
- *Step track,
- *Auto-search

Tracking Accuracy

Better than 10% receive 3dB beamwidth RMS in Step Tracking
 Position display resolution: 0.001°
 Position control resolution: 0.002°

Controls / Interfaces

Front panel touch screen control
 Serial: RS-485, RS-232
 Receiver Interface: 0-10 VDC
 Alarm: Summary output

Environmental

Temperature: 0 to 50° C
 Humidity: 95% non-condensing

Electrical

100-240 VAC, 47-63 Hz 500 W typical

Mechanical

ACU: Height: 4 Rack Units
 Width: 19"
 Depth: 19"