

Antenna Control System Model 8200

The Next Generation in Antenna Control

Performance – Flexible tracking modes, intuitive menu layouts and a compact parameter set keep your limited motion antenna applications on point.

Availability – We understand the need for quick delivery. Lean manufacturing methods allow us to ship most systems within 30 days of an accepted order!

World-Class Support – You are never on your own with a Radeus Labs product. The experts at Radeus Labs are standing by if you need help.



Modular Configurable Compatible

This antenna control system meets the requirements of retrofits and new installations. As a retrofit option, the 8200 ACU is compatible with industry standard drive-cabinet interfaces and legacy position-feedback devices such as absolute rotary optical encoders, standard singlespeed brushless size 11 resolvers, and two-speed brushless size 20 resolvers.

FEATURES

- Touchscreen controls for all operations
- Efficient, intuitive graphical user interface
- Hardware jog buttons with LED indicators
- Data and parameters secured in nonvolatile storage
- Innovative setup wizard eases installation
- Secure TeamViewer integration for remote and shared ACU operation
- Field-proven in critical applications

MODES OF OPERATION

ManualFront-panel buttons for two-speed, manual jog control.Move to LongitudePosition to AZ and EL angles determined from the longitudinal orbital slot.Move to Look AnglesPosition to user-provided AZ, EL, and POL angles.Step TrackPeriodic algorithm to perform an AZ-EL scan pattern to peak up signal strength.Predictive TrackPoint the satellite dish using an orbital model created from previous peak AZ and EL
step-track data points.TLE (Two-Line Element)Track automated positioning based on NORAD two-line element sets.Intelsat 11Automated tracking to AZ and EL coordinate sets derived from Intelsat 11 parameters.

OPTIONAL MODES

Computer Track Sun and Moon Track Star Track Automated positioning using commanded angles supplied from an external computer. Automated positioning to AZ and EL locations of the sun and the moon. Automated positioning to AZ and EL locations of radio stars.



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Drive Cabinet Model 8250

The Radeus Labs 8250 drive cabinet reduces IFL costs. It also requires fewer connections between the control center and the antenna.

FEATURES

- Remote system control over Ethernet via SNMP.
- A single cable (Ethernet or fiber optic) links the drive cabinet and ACU.
- Remote system control via a secure TeamViewer connection to the ACU.

• Dedicated jog button-indicators — like those on the ACU — show when motors are engaged, whether from drive cabinet or ACU.

• Options enable users to monitor and control brakes, interlocks, and feed status, as well as various position-feedback resolution and accuracy options.



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TRACKING ACURRACY

Better than 10% receive 3dB beamwidth RMS in step track.

Nominally, 5% receive 3dB beamwidth RMS with predictive track. Specifications may be subject to change. Please contact our sales staff for details.

ENVIRONMENT

ACU

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

Drive Cabinet

Temperature Humidity -10°C to +50°C standard, -55°C to +50°C with low temp option 100% condensing

POWER

ACU 100-240 VAC, 47-63 Hz; 100 W typical

Drive Cabinet

200 and 400 Volt Class, 50-60 Hz, 5-wire WYE Current requirements are determined by motor horsepower.

MECHANICAL

ACU

7"H x 19"W x 19"D (4-rack units) Weight: 20 lbs.

Drive Cabinet

36"H x 30"W x 10"D (legs: 18"H) Weight: 100 lbs. Motor size: 1-5 HP standard. Larger sizes available.

INTERFACES

Remote	Ethernet, SNMP , Serial
Serial	USB, RS-232 (x2 each)
Alarm	Summary output
Receiver	Built-in tracking receiver
	Optional serial DTR
ADU	Standard drive interface, or Ethernet or fiber interface

POSITION FEEDBACK



This EnDAT encoder provides position feedback for azimuth, elevation, and polarization. At 25 bits of resolution, this allows a display resolution of 0.001°. Accuracy: 320" or 30.005°

WARRANTY

Three-year warranty, parts and labor.



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