

Antenna Technologies



Overview

For over 50 years, CPI Antenna Technologies experienced engineering staff has been developing high-precision, economical satellite tracking and control systems.

System

The Model 830A Antenna Control System provides precision satellite acquisition and tracking with most fixed, mobile, transportable, and flyaway antennas. The Antenna Control Unit (ACU) is the operator interface point for the system and features operator friendly menus. The 2RU ACU contains all control components including the processor, M&C interface, motor controllers and tracking receiver.

Internal Tracking Receiver Option

- 950 - 2150 MHz L-Band input
- 45 dB-Hz C/No
- -85 to -10 dBm input
- Spectrum display

Pointing Accuracy

Normally better than 0.07° RMS in winds of 30 mph gusting to 45 mph. This includes normal drive train errors, but excludes structural errors between the transducers and RF beam.

Tracking Accuracy

In Enhanced Memory Track, normally better than 10% of the receive beamwidth in winds of 30 mph gusting to 45 mph, satellite inclination of up to 5°.

FEATURES:

- Designed for transportable and fixed antennas
- Enhanced memtrack, steptrack & pointing modes
- Dual color touch displays
- Optional internal tracking receiver
- GPS, heading sensor, inclinometer interface
- Supports multiple antennas
- One touch acquisition, easy operation
- Operator interface point for the system

BENEFITS:

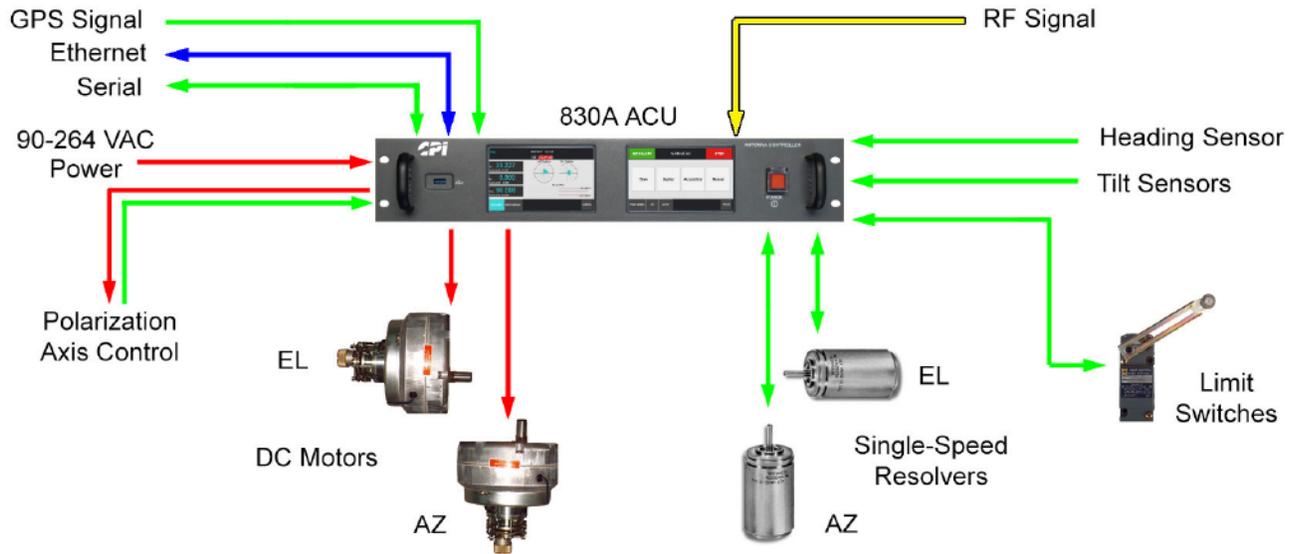
- Economical satellite tracking

APPLICATIONS:

- Economical fixed or vehicle/trailer mounted antennas with tracking

Operational Modes			
Tracking	Pointing	Acquisition	Other
Steptrack	NORAD	Scan	Deploy
Memtrack	Preset position	Satellite Database	Stow
	Manual Jog		Calibrate
	Table Track		

CPI Antenna Control System - Model 830A



SPECIFICATIONS

- CE, FCC, WEEE
- Auto Calibrate, Auto Deploy, Auto Stow
- Recommended for antenna beamwidths >0.3°

ACU	SIZE	WEIGHT	POWER
2RU rack mount chassis with sides	3.5"H x 19" W x 17" D	16 lbs (7.5 kg)	100-240 VAC~ 50/60 Hz 600W Max

ANTENNA INTERFACE

- AZ/EL/POL DC Motor amplifiers available for 24V motors. Potentiometer or Resolver Position Feedback for AZ/EL axes.
- EL velocity limit and AZ centered with inputs available
- Antenna sizes supported depend on motor requirements

ENVIRONMENTAL	TEMPERATURE	HUMIDITY
Operating	0 to -40°C	90% Non-Condensing at +30°C
Storage	40° to 70°C	95% Non-Condensing

ALTITUDE	VIBRATION
3048m per MIL-STD-810G M500.5-P2	MIL-STD-810G M514.6-P1-C4 and M514.6-P1-C7

Contact us at CustomerCareSAT@cpii.com or call us at +1 770-689-2040

The data should be used for basic information only.
Formal, controlled specifications may be obtained from CPI for use in equipment design.



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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design. © 2022 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.

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