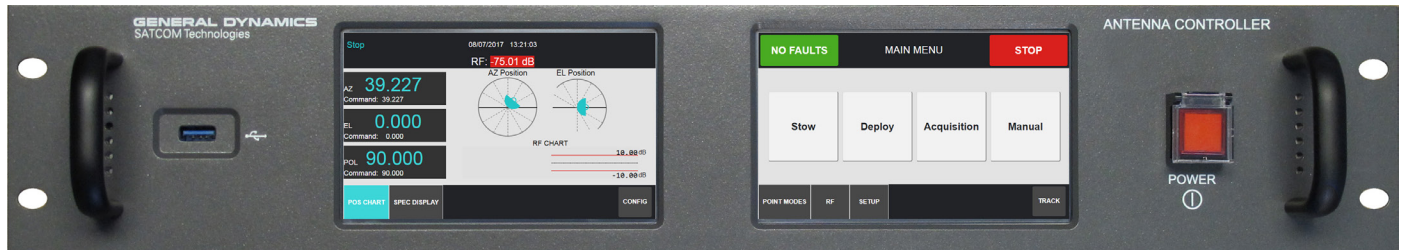


# 830A Antenna Control System

*Economical Satellite Tracking*



Designed for Transportable and Fixed Antennas

Steptrack and Pointing Modes

Dual Touch Screen Color

Easy to Operate

GPS, Flux Gate Compass, Inclinometer Interface

Configurable to Multiple Antennas

## Overview

For over 50 years General Dynamics SATCOM Technologies' experienced engineering staff has been developing high-precision, economical satellite tracking and control systems. The Model 830A Antenna Control System provides precision satellite acquisition and tracking with most mobile, transportable, fixed and flyaway antennas. The Antenna Control Unit (ACU) is the operator interface point for the system and features operator-friendly function menus. The 2RU ACU contains all control components including the processor, M&C interface, motor controllers and tracking receiver.

## Tracking Receiver Option (with Spectrum Display)

The 830A has an optional internal L-Band receiver. L-Band operational frequency range is 950 - 2150 MHz and the minimum tracking C/No is 45 dB-Hz.

## Antenna 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.

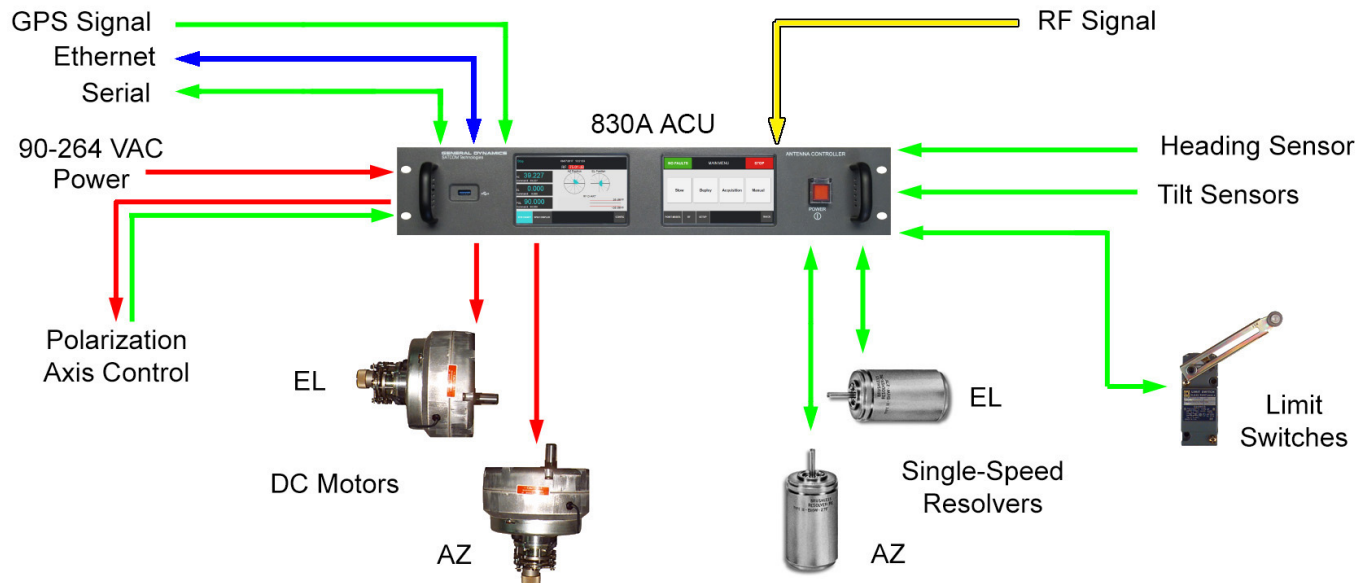
## Enhanced Memory Track

Typically better than 10% of the receive beamwidth with satellite inclinations up to 5°.

A variety of operational modes are available for quick target acquisition, pointing and tracking.

OPERATIONAL MODES			
Tracking	Pointing	Acquisition	Other
Steptrack	NORAD Preset Position Manual Jog	Scan	Deploy Stow Calibrate

# 830A Antenna Control System



## 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)	Accepts 90 - 264 VAC, 50/60 Hz 600W Max, application dependent

## 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 50°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

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