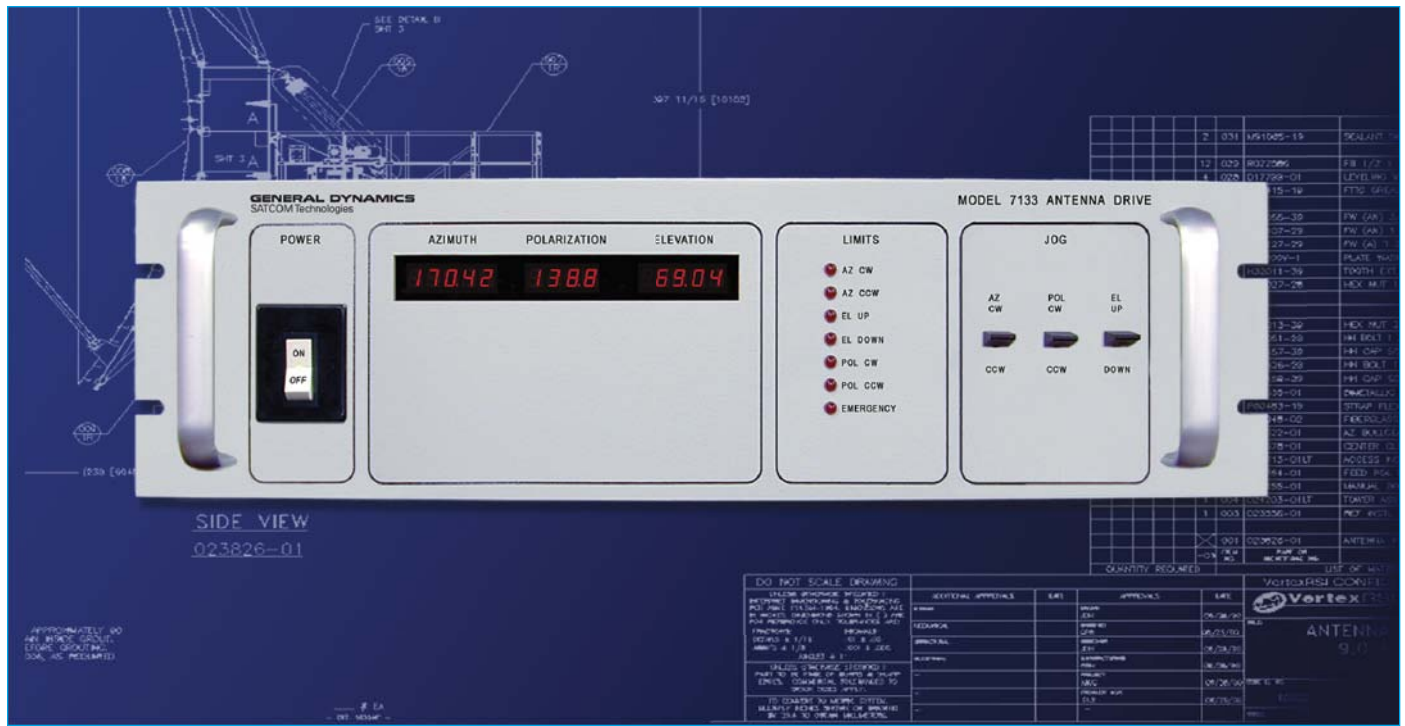


MODEL 7133B ANTENNA CONTROLLER



Key Features

Simultaneous 3-axis real-time control and position display

Front panel, itemized limit / E-stop indications

“Local” drive cabinet control (standard)

NEMA-rated motor control components and overcurrent protection

Brushless resolvers and monolithic resolver-to-digital encoding electronics

NEMA 4X-rated drive cabinet enclosure

Limit switch interlocks in each direction of travel

Product Description

General Dynamics SATCOM Technologies (GDST) developed the Model 7133B Antenna Controller for applications requiring low cost and dependable manual antenna positioning for small and medium aperture antennas. The 7133B provides 3-axis (AZ, EL, and POL) control.

Highly reliable, brushless resolvers at the antenna provide accurate position data to resolver-to-digital converters in the rack-mounted Antenna Control Unit (ACU). DIP switches in the ACU provide convenient position offset adjustment without the necessity for tedious manual shaft adjustment at the antenna.

On the control panel, 7-segment displays simultaneously indicate all axis positions. Momentary contact switches change the position of the antenna with single-speed, real-time drive control. LED's indicate if any of the limit switches trip or if the emergency stop button is engaged.

7133B Technical Specifications

Additional Features

"Local" emergency stop control on the drive cabinet

Interfaces with standard 3-phase induction motors

Can be configured to operate with virtually any 3-phase power source

Specifications		Physical Data	
Position Encoding	Absolute, single-speed brushless (size-11) resolvers and resolver-to-digital conversion ICs (4 volt, 2500 Hz reference signal).	Inside Unit Dimensions (in.)	5.25H 19W 19D (3 EIA RUs)
Position Encoding Resolution	14 bit (0.022°)	Outside Unit Dimensions (in.)	24H 20W 8D (42H total w/ legs)
System Interconnect Cabling	System includes 100 feet of interconnect cabling. Additional cabling is available up to a maximum of 1500 feet.	Power	208/120 VAC, 3-phase, 60 Hz, 5-wire, WYE
	Controller/Drive cabinet interface cable is 25/C #22 AWG.		380/220 VAC, 3-phase, 50/60 Hz, 5-wire, WYE
	Resolver/Controller cable is 3-shielded pair, #22 AWG (per resolver).		415/240 VAC, 3-phase, 50/60 Hz, 5-wire, WYE
Environmental			
Rack-mounted Unit			
	Temperature	0° to 50° C	
	Humidity	90% Non-condensing	
Outside Equipment			
	Temperature	-10° to 50° C (-40° C with optional low temp package)	
	Humidity	100% Condensing	
Ordering Information			
Specify:			
1) Specify line voltage and frequency; for example: 208 VAC, 60 Hz.			
2) Specify line voltage and frequency for rack-mounted equipment; for example: 120 VAC, 60 Hz.			
3) Specify the length of cables required for the controller, drive cabinet and resolver interfaces (100 ft. is provided).			

The 7133B system includes a drive cabinet that houses motor drive circuitry and provides "local" control capability. The cabinet housing comes standard as a NEMA 4X-rated enclosure for outstanding corrosion protection even in the harshest environments.

Shown below is the 7133B rear panel:



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