



# MODEL R3500

## Heavy Duty Rotator with DRC-4 Rotator Control Unit



The R-3500 Universal Rotator System is designed for medium to heavy duty antenna rotation applications where economy, versatility and reliability are emphasized. Designed for universal applications, the R-3500 will mount in towers with a face width as small as 18". The high axial load capacity of the rotator makes it suited for top plate mounting on towers.

The output shaft adaptor casting will accept any mast shaft diameter from 2" to 3", and the drive shaft will accept up to 1 5/8" diameter transmission lines concentrically within the drive shaft. The R-3500 is designed for long term regular use under rugged conditions.

Coupled with the DRC-4 the unit is capable of continuous or North Centered rotation in either clockwise or anticlockwise direction. Rotator position is continuously monitored by a solid state absolute encoder that is impervious to dirt and weather conditions. The system includes the rotator and controller. A rotary joint, mounting hardware, tower shelves, masts, mast clamps, top plates, and thrust bearings are optional. Custom manufactured five conductor powers and control wire is also available. (Rotator is Patent Pending).

Rotating Torque	4,300 in. lbs
Maximum Overturning Moment	15,000 ft. lbs
Maximum Vertical Load	10,000 lbs.
Rotation Speed	1.25 RPM Maximum-User Selectable
Position Accuracy	+/- 1 degree
Drive Type	Worm Gear
Motor Horse Power	¼ H.P. (TEFC 48 VDC Motor)
Power Requirements	115 or 230 V.A. C. 15 Amp Circuit
Total Reduction	1460:1
Operating Temperature	-40°C to +70°C
Forward/Reverse Delay	3 seconds User Selectable
Weight	85 lbs. (38.5 Kg)
Dimensions	18" width x 23" length x 7" height (46cm x 58 cm x 18 cm)
Models Available	Continuous Rotation or North/South Centered

**United States Antenna Products, LLC – 5263 Agro Drive, Frederick, MD 21073**

Phone 240-341-7120 Fax 240-341-4980 [www.usantennaproducts.com](http://www.usantennaproducts.com)

## Digital Rotator Control 4



The DRC4 is a table top controller that features the latest PIC microprocessor technology that yields a truly unique and flexible product. High quality components are used throughout, including the heavy duty transformer. Coupled with the sealed solid state absolute encoder, you are ensured years of reliable accurate service from your system.

The DRC4 can be used as a standalone unit or with a PC and the supplied custom Server/Client software. This software is the same as that used in our Heavy Duty Rotators. It can be controlled locally, or with an internet connection, can be controlled from anywhere in the world.



### Operating Features:

- 360 degree continuous rotation in either direction (on continuous model).
- Remote Control turns to a heading, or to 1 of many pre-selected locations.
- Headings are automatically calculated if needed by the Server.
- Up to 4 DRC 4 rotator systems can be connected to 1 Server.
- Up to 8 remote access users may connect and operate the rotators on 1 server at the same time.
- Remote access is user and password authenticated.
- Motor speed and soft start/stop is controlled by Pulse Width Modulating the drive motor at full peak voltage to ensure full torque at low speeds.

The DRC4 can also be used in conjunction with many freeware or purchasable Windows based rotator control programs. The controller has both serial and USB connections to the PC.

A Rotary joint, mounting hardware, tower shelves, masts, mast clamps, top plates and thrust bearings are optional.

Custom manufactured combined five conductor power and control wire is also available to make installation simpler.

