



RC4500-7200

Antenna Controller and ODU



The RC4500-7200 Antenna Controller is a direct replacement for the Vertex/GD 7200 ACU. The RC4500-7200 can interface directly to a 7150 outdoor box, or can be used with an RCI designed outdoor unit.

FEATURES

- **Cost Effective**
Enjoy all the modern Antenna Control unit features while preserving the antenna and IFL cables.
- **Sensor Compatibility**
Pin compatible with 16-bit resolvers and 25-bit optical encoders.
- **No IFL replacement required**
Retrofit can be completed using existing IFL cable between the ACU and ODU.
- **Configurable**
Dual speed control for motors from 1/3HP to 5HP (10HP @400V).
Each system is customized to meet customer needs.
- **Multi-Band Operation**
Simultaneously supports C, KU, L, Ka and X-band satellites.
- **Extensive Remote Interface Option**
Unit can be controlled via Ethernet, Fiber, or via a supervisory monitor and control system.
- **Multiple Receiver/Modem Options**
The RC4500 can natively control a wide range of beacon tracking receivers for the highest precision tracking demands.
- **Local Jog Control & Status Monitoring**
Allows antenna positioning without the use of the RC4500 ACU for antenna maintenance
LED indicators show limit and drive alarm status

ODU Specifications

Size: 36"H x 30"W x 10"D (without floor mount kit)

Weight: 100 lbs typical

Operating Temperature: -40°C to +55°C (Standard)

Input Power: 208 to 480VAC 3-phase, 50/60 Hz, 20-amp service typical (varies based upon user requirements)

Research Concepts, Inc.

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The RC4500-7200 will include the industry standard ease-of-use of the RCI family of controllers. When matched with the 7200 modes of operation, it creates a near seamless transition from obsolete to modern.

FEATURES

7200	RC4500	RC4500 Description
Manual	Manual	Two-Speed AZ and EL Positioning; Single speed POL positioning.
Move to Look Angles	Recall	Automatic movement to preprogrammed coordinates
Step Track	Step Track	Periodic pointing optimization by way of a smart tracking algorithm. Better than 10% HPBW RMS.
Orbit Prediction Tracking (OPT)	Enhanced Predictive Tracking (EPT)	Fully automatic tracking mode. Uses collected data to build an ephemeris model for the satellite. Better than 5% HPBW RMS.
Computer Track	Remote MoveTo	Remotely load in commanded angles for real-time automatic positioning from M&C system
NORAD Track	TLE Tracking	Automatic positioning/tracking from NORAD Two-Line Element (TLE) datasets.
Table Track	Memory Track	Smooth tracking by interpolation of an ephemeris table.