



RC4500 AIU-7

RC4500 Antenna Controller with Integrated Antenna Interface Unit



Take advantage of RCI's vast experience with embedded antenna controllers, cost savings and simplified installation when using the AIU-7 variable speed outdoor antenna controller with integrated RC4500 ACU.

FEATURES

- **16-Bit Resolver Position Sensors**
0.005 deg resolution, 3.5 minute accuracy
Optional potentiometer for polarization position sense
- **Inclined Orbit Tracking**
Step Track / Memory Track /
NORAD Two Line Element (TLE)
- **Integrated Beacon Receiver**
An ASC Beacon Receiver allows for a low-cost, all-in-one inclined orbit tracking solution
- **Optional DISA Compliant Beacon Receiver**
A low threshold of 43dBHz, fast re-acquisition of less than 1 second and high linearity, manufactured by Novella Satcoms Ltd. Supports modulated beacons
- **Ethernet Interface**
Supports web-browser based Remote Front Panel & UDP encapsulation of serial M&C commands
- **Optical Interface**
Support for Single-Mode Fiber communication, requires the Ethernet Interface option
- **Optional Spectrum Analyzer**
May be used in Spectrum Analyzer mode or optionally in Beacon Receiver mode
- **Non-volatile Memory**
Stores 50 satellites in non-volatile memory, all of which may be inclined orbit
- **Variable Speed for AZ/EL Motors**
1/2HP to 5HP Variable Frequency Drives, customized for each antenna
Solid-State Drive Circuitry allows configurable motor dynamics, continuous over-current monitor
- **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

AIU Specifications

Size: 36"H x 30"W x 10"D (without floor mount kit)
Weight: 100 lbs typical
Operating Temperature: -20°C to +40°C
Input Power: 208 to 480VAC 3-phase, 50/60 Hz, 20-amp service typical (varies based upon user requirements)

Research Concepts, Inc.

9501 Dice Lane
Lenexa, Kansas 66215 USA
Phone: 913.422.0210
Fax: 913.422.0211

E-mail: sales@researchconcepts.com

www.researchconcepts.com



RC4500 AIU-7

RC4500 Antenna Controller with Integrated Antenna Interface Unit



Take advantage of RCI's vast experience with embedded antenna controllers, cost savings and simplified installation when using the AIU-7 variable speed outdoor antenna controller with integrated RC4500 ACU.

FEATURES

- **Local Jog Control**
Allows antenna positioning directly at the antenna via swing panel-mounted switches
- **Limit Status at Pad**
LED indicators show when a limit is reached
- **AZ/EL Drive Status at Pad**
LED indicators on jog panel reveal drive status
- **Fast Acting Emergency Stop**
Clearly labeled, externally mounted Emergency Stop Switch has press to STOP, twist to reset operation
- **NEMA-4 Enclosure**
May be wall-mounted or mounted directly to the Antenna Pad using the Floor Mount Kit
- **Variable Speed for AZ/EL Motors**
Independent Variable Frequency Motor Drives for 1/2HP to 5HP AZ and EL motors allow user-adjustable speed control, customized for each antenna
- **Solid-State Drive Circuitry**
Configurable motor dynamics, Continuous Over-Current Monitor
- **Customized Polarization Drive**
Single Speed Polarization Control for DC, Single-phase or Three-phase Polarization motors
- **Supports Electromechanical Brakes**
Optionally support for AZ and EL motor brake control
- **Flexible**
AIU7 may be configured for a wide variety of Antenna Systems, both for new antennas and retrofits of older systems

AIU Specifications

Size: 36"H x 30"W x 10"D (without floor mount kit)
Weight: 100 lbs typical
Operating Temperature: -20°C to +40°C
Input Power: 208 to 480VAC 3-phase, 50/60 Hz, 20-amp service typical (varies based upon user requirements)

Research Concepts, Inc.

9501 Dice Lane
Lenexa, Kansas 66215 USA
Phone: 913.422.0210
Fax: 913.422.0211

E-mail: sales@researchconcepts.com

www.researchconcepts.com