

FEATURES:

- PC-104 Based Controller
- Wide Angle Viewing TFT Touch Screen
- Local Control via LAN, RS-232/422 or Fiber Optic
- Help Menu with ACU User Guide
- Password Protection for Sensitive Settings
- BIT (Built in Test) Features
- Robust Field Tested Software
- Analog & Digital Display of Antenna Position, Error Signals, and AGC
- 5 Modes of Operation; Standby, Manual, Track / Acquire, Search and Slave
- Removable Flash Memory Drive
- Standard 19-in Rack Mount
- Optional Expansion Bay for ISA or PCI Interfaces
- Utilizes Commercial Off-The-Shelf Hardware
- Controller Operates with Analogue, Pulse Width Modulated, and Serially Controlled Servo Amplifiers
- Integrated Handwheels
- Optional Self Stabilization Available
- Optional Fiber-Optic Control Interface Available



Modular control of the software allows the ACU to be quickly modified to a specific system.

The P500/P600 Antenna Control Unit is a digital control system that provides all the necessary controls and displays required for real time operation of an antenna system, pedestal, and associated equipment. Utilizing commercial off-the-shelf hardware, the P500 and the P600 offer a high level of functionality, field-proven software, and superior reliability. The antenna control unit utilizes the latest available Pentium™ CPU, thus ensuring adequate processing power. The operating system is Windows™ based and the CPI Malibu Division proprietary application software is written using Visual Basic.

The ACU operates with either a conical or electronic scanning feed and uses the amplitude modulation and signal strength information from a receiver to produce a full tracking system. Software setting of threshold, hysteresis, saturation and noise floor are part of the standard ACU package.

The front panel of the ACU includes a 12-inch (P500) or a 15-inch (P600) TFT touch screen, azimuth and elevation hand wheels. While the rear panel of the ACU is customized for the individual system requirements, standard interface connections include an AC power connector, a 61-pin control interface cable connector, BNC-female connectors for AM & AGC input (will accept up to sixteen receivers), an Ethernet interface connector, an RS-232 interface connector, IEEE-488 connector, two USB interface connectors (one used for the desktop mounted joystick provided), as well as keyboard and mouse connections. Optional interfaces include RS-485 and fiber-optic connectors.

An optional ISA or PCI expansion bay, capable of storing up to six boards, can be integrated into the ACU chassis to support third party boards, such as IRIG, receiver, combiner, bit synchronizer, and decommutator modules

Related Data Sheets

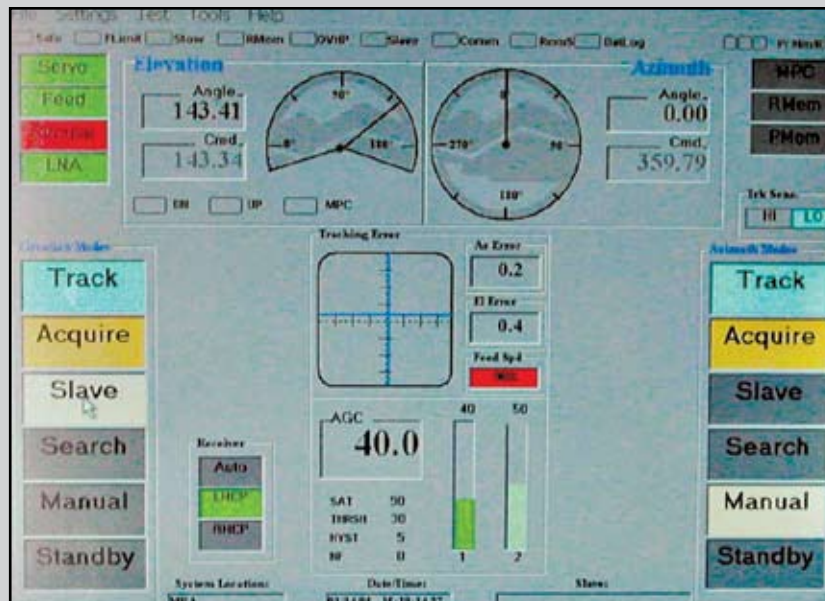
• HD Pedestal Series

• Local/Remote ACU

• Fiber-Optic Interfaces

MODEL P500 ANTENNA CONTROL UNIT SPECIFICATIONS

Specifications	
Modes of Operation	Function
Standby	All positioning commands are disabled and brakes are set.
Manual	Operator may position antenna via handwheels, joystick, immediate designate command or user pre-programmed position selection.
Track/Acquire	If Acquire mode activated antenna will automatically track the target once the AGC detected level is greater than threshold level set by operator.
Search	The pointing angle of antenna is scanned in search of the target in a box type pattern. The search center, width and rate can all be modified real-time.
Slave	The antenna is slaved to another system via an RS232/422 communication link or digital inputs.
Test & Calibrate Modes	
Velocity	Verifies pedestal dynamics. Can be programmed by operator in GUI set-up.
Acceleration	
Sun Track	Used to verify tracking operation and perform G/T measurements.
GPS Track	Accepts GPS data for pointing.
Satellite Track	Uses COTS software with information on most commercial satellites to guide the ACU.
Demodulator Zero Calibrate	Used to optimize tracking control loop. User specified or automatically set.
Demodulator Gain Calibrate	
General Specifications	
General	Designed for use in indoor environments
Temperature	OPERATING 0°C to +52°C (non-condensing)
	STORAGE -25°C to +70°C (non-condensing)
Power Requirement	115-230 VAC, 50-60 Hz (150 watts)
Size	HEIGHT P500 -10.50 inches P600 -14.00 inches
	WIDTH 19.00 inches
	DEPTH 18.25 inches
Weight	<28 lbs (13 kg)



SAMPLE SCREEN