



CREATIVE DIGITAL SYSTEMS INTEGRATION

Antenna Control Unit (ACU)

Universally Adaptable Pedestal Controller

The ACU is based on EBX hardware running a Linux operating system. All modules are written in C and Python using MongoDB as its relational database. The combination of operating system and programming languages are well matched to the selected hardware, making this a very efficient processing entity. CDSI's ACU exceeds the most stringent requirements on any antenna/pedestal systems providing seamless operation. The UI is generated using the IDE Glade designed for GTK+ toolkit and the GNOME desktop environment resulting in an efficient display of analog, digital and control buttons.

Key Capabilities

- Universally Adaptable to Any System
- Pointer, RF Tracker, & Optical Tracker
- Intelligent Motion Stabilization
- Up to 3 Axis Control Providing Keyhole Mitigation
- Compatible with Joysticks, Gamepads & Standard Computer Peripherals
- Full Control & View Only Modes
- Redundant Power Supply
- Removable SSD
- Local and Remote Pedestal Control
- Multiple Levels of Security & User Access
- ACU Available in:
 - 8U Fully Integrated Rack Mount
 - COTS 3U Computer, 17" Touchscreen Monitor

Fully Integrated ACU



COTS ACU



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Specifications

Hardware:

Operating System.....	Linux
Processor.....	Intel Core i7, 3.7GHz (or better)
Graphics.....	Intel Gen9 Graphic Engine
Memory.....	32GB
Hard Drive.....	SSD, Raid Available
Ethernet.....	2x GbE (100/1000Mbps)
Monitor.....	15" LCD Panel
Power Supply.....	Redundant, 120-240VAC

Software:

Language.....	Python, C, GTK+ Toolkit
Pedestal Type.....	Pointer, RF Tracker, Optical Tracker, Command Destruct System
Axis.....	Up to 3 Axis
Stabilization.....	Intelligent Motion
RF Receivers.....	Up to 8 AM/AGC Inputs
Slaving.....	TLE, Burn Files, Sun, Client ICD
Time Synchronization.....	IRIG-B, NTP
Remote Control.....	View Only and/or Full Control
BIT.....	Antenna Pattern, AM Calibration, Vel/ACC

ACU UI as an
Optical Tracker

