



# TYPICAL APPLICATIONS

ANTENNA SIZE	C BAND	X BAND	Ku BAND	DBS BAND	Ka BAND	Q BAND
3.8	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	940A / 950A	950A / 970
4.6	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	--	--
4.8	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	830A / 930A / 940A / 950A	940A / 950A	940A / 950A	950A / 970
6.3	930A / 940A / 950A	930A / 940A / 950A	930A / 940A / 950A	940A / 950A	940A / 950A	970 / 980 / 990
7.3	930A / 940A / 950A	930A / 940A / 950A	940A / 950A	940A / 950A	940A / 950A	970 / 980 / 990
9.0 / 9.2	930A / 940A / 950A	940A / 950A	940A / 950A	940A / 950A	950A / 970 / 980 / 990	970 / 980 / 990
11.1	940A / 950A	940A / 950A	940A / 950A	940A / 950A	970 / 980 / 990	970 / 980 / 990
13.1	940A / 950A	940A / 950A	940A / 950A	940A / 950A	970 / 980 / 990	970 / 980 / 990
16.4	940A / 950A	940A / 950A	970 / 980 / 990	970 / 980 / 990	970 / 980 / 990	970 / 980 / 990
18.3	940A / 950A	940A / 950A	970 / 980 / 990	970 / 980 / 990	970 / 980 / 990	970 / 980 / 990
21.0	940A / 950A	940A / 950A	970 / 980 / 990	970 / 980 / 990	970 / 980 / 990	970 / 980 / 990

Application Notes:

- Please contact CPI before using this information for system design or further details.
- Typical CPI systems represented (not exhaustive). Most systems can be configured to meet specific performance needs, e.g. positioner, feedback, and/or tracking sub-system.
- While multiple control systems may be suitable for a given configuration, their performance and features may vary.
- Upgrade/retrofit systems may require additional considerations.



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- 24/7/365 day technical support
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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.  
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# ANTENNA CONTROL SYSTEMS



## KEEPING YOU CONNECTED & IN CONTROL OF YOUR ANTENNAS FOR OVER 50 YEARS

CPI is the World's leading end-to-end provider of ground-based satellite communications products and high-precision scientific and satellite terminals and services. We offer a variety of satellite antenna control units, power drive units, tracking down converters, receivers and monitor and control systems to fit a wide range of applications. These precision products and systems provide cost-effective solutions to keep you connected and in control of your satellite antennas at all times.





# STANDARD FIXED CONTROLLERS

## 950A Control System

- Steptrack, Optrack and Monopulse tracking
- Ideal for medium to large limited-motion fixed antennas, multi-band applications
- Support for size 11 resolvers and optical encoders
- Minimizes cross-site cabling
- Flexible tracking receiver integration
- Ethernet interface and fiber option for lightning protection
- Software upgradeable state-of-the-art touch-screen GUI
- Used for single AC motor/axis applications
- Stable tracking of highly inclined GEOs



Power Drive Unit (PDU)

## 930A & 940A Control System

- Ideal for single AC motor (per axis) antennas
- Ideal for small to medium limited-motion fixed antennas, single-band applications
- Steptrack tracking (930A), Optrack (940A)
- Easy-to-operate, dual color touch-screens
- Size 11 resolvers (930A) and encoders (940A)
- Built-in tracking receiver
- Ethernet interface
- Full software upgradeability
- Backward compatible with the 7150 cabinet



## 830A Control System

- Designed for transportable and fixed antennas
- Ideal for small to medium limited-motion fixed antenna applications
- Optional built-in tracking receiver
- Supports size 11 resolvers
- Built-in Power Drive Unit (PDU) in the Antenna Control Unit (ACU)
- Easy-to-operate, dual color touch-screens
- GPS, flux gate compass, inclinometer interface
- Full software upgradeability



# HIGH PERFORMANCE CONTROLLERS

## 970 Control System



2 Motor System

## 980 Control System



3 Motor System

## 990 Control System



Multiple Motor System

- Ideal for GEO, LEO, TT&C, RADAR, or celestial applications
- All bands, all orbits capability
- Multiple motor per axis capability (torque compensation)
- Steptrack, Optrack and Monopulse tracking
- Support for optical encoders and resolvers
- Flexible tracking receiver integration
- Ethernet interface and fiber option for lightning protection
- Fully customizable systems available



# TRACKING RECEIVERS

## 520A Analog & 550A Digital Tracking Receivers

- Configurable for tracking receiver, spectrum display (550A only), or uplink power control
- Extended L-band 890-2450 MHz, single or multi-band with converters for S/C/X/Ku/Ka
- Acquire C/No 35 dB-Hz (550A), 40 dB-Hz (520A)
- Single or dual polarization inputs
- Ethernet connectivity
- Steptrack or Monopulse capability
- Dynamic range > 90 dB

