

## Control Box Comparison

Design and Features	CP1 and CP2 (with E1 Chip)*	CP3 (with V2 Chip)*	CP4
Allows use of APCC software		X*	X
Faster processing speed and increased accuracy			X
Allows Automatic "Deadman Switch" Safety Timer function (requires APCC software)		X*	X
Applies Safety Slew logic to all slew commands			X
Reads capability of PEM state, guide, center and slew rates and of drift (both axes) and trim (both axes)		X*	X
Allows Auto-Park		X*	X
Improved Meridian Delay logic		X*	X
Accepts timed guide move command		X	X - Enhanced
Allows variable tracking rate commands in both RA and Dec axes		X	X - Enhanced
Accepts variable centering rate commands		X	X - Enhanced
PEM memory command	X	X	X
Can use Alt-Azimuth coordinate commands	X	X	X
Park command de-energizes motor and remembers R.A./Dec. coordinates when power is removed	X	X	X
Recalibration	X	X	X
Motor stall protection	X	X	X - Enhanced
Automatic meridian swapping in GoTo slewing mode	X	X	X
Continues to track at sidereal rate, even while slewing	X	X	X
Allows E-W reversal in R.A. and N-S reversal in declination	X	X	X
RS-232 ports	X	X	X - Enhanced
USB 2.0 - internally powered & ruggedized for cold			X
Ethernet			X
WiFi - via point-to-point or network			X
Direct download of future firmware updates			X
Integrates all functions of the Absolute Encoders and the Precision Encoders and Mechanical Limit Switches			X
Runs on 12V DC power	X	X	X
Backward Compatibility with all GTO mounts		X	X
Machined aluminum housing provides robust protection for electronics	X	X	X
Dovetail construction allows quick removal from all GTO mounts	X (CP2 only)	X	X
12V DC receptacle for locking power cable	X	X	
12V DC receptacle for locking power cable - robust 2-pin connector			X
*Earlier Chips May Not Have All the Features			