

Comparison Chart of Centroid ACORN + THC DIY Plasma CNC Logic Control and MASSO VS CandCNC MP3700-DTHC5 products				
FEATURE	Acorn Plasma	MASSO	MP3700 Plasma	Notes
Selectable Run Profiles	1	1	99+	Desktop Icon select. GUI configuration tool lets you COPY and EDIT as many CONFIGS (profiles) and SAVE them as desktop icons.
Stored Settings/ Cut parameters for Plasma	Internal Table Presets	From Screen From G200 in code	*Internal tables + embedded tool codes in G-code (auto)	* Tool tables in SheetCAM for Hypertherm including new SYNC models. Auto values from cut file.
Closed Loop THC (PID)	✓	✗	✓	Probably the most important feature to allow for high speed Z speeds and smooth operation without oscillation
Toolpath Tracking accuracy.	2 settings. Smoothing and Precision	✗	* Adjustable in .001" increments	* Forces machine to hold accuracy over speed. Trajectory Planner Adapts feed rate to hold toolpath setting.
THC Response Settings (PID)	Settable	✗	*3 presets + custom	* Different CONFIGS can have different THC response and Z axis tuning settings
THC Tuning	Yes, Min and Max velocity and Accel of Z under THC	✗	* Separate from Z axis Velocity and Acceleration	* Uses different Velocity and Accel curves when under DTHC control
Velocity Anti Dive (VAD)	✓	✗	✓	AKA "Corner Lock" stops torch diving on corners and detail cuts.
End of Cut Anti_Dive	✗	✗	✓	Turns off DTHC set distance before end of each cut.
Auto Preset volts	✓	✓	✓	Samples beginning of cut and sets the Preset volts.
Small hole/small feature Anti-Dive	✗	✗	✓	Keeps DTHC OFF on small holes and short cuts. Settable Minimum cut length for DTHC ON in SheetCAM.
"DRY RUN" (torch and THC off) mode	✓	✗	✓	

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Remote Plasma Pickup	✓	✗	✓	* PWMIIA Digital (isolated) up to 50ft away
Direct CPC connect via single cable	✗	✗	✓	MIC-03 cables Single connection 3 pairs
Support for non-CNC Plasma cutters	✗	✗	✓	Connection kits for plasma with no CPC or CNC interface. RAV-02 add-on voltage divider card option
Wired; in Case	No	No	✓	10 X 7 X 3 molded case
Inputs	8 (non-isolated)	32 Opto Isolated, same power ground	16 Opto Isolated, isolated Input Ground	Isolated Ground = High noise rejection
Outputs	8 relay card	16 Low Power TTL	* 2 AC Switched Outlets One 20A	* Expansion relay module for four 10A additional relays
Phone Support	\$90/hr	N/A	Free 1 year	
Online Support	Support Forum	Forum	Support Forum; Email	
Warranty	Not listed	?	2 Years Parts & Labor	
Power	User Wired	User Wired	* Prewired 120VAC	*cord and on/off switch included
Motor-driver I/O	DB25 to screw terminals adapter card Option	Screw terminals	MTA250D via DB25 cable for discreet drivers and ribbon cable to EZPlugII cards. Direct plug to G540 Gecko driver	Locate MP3700 box up to 15ft from power and motor drivers. 50Ft MP3700 to PC / Monitor
Max axis/motor count	4	5	*6	Supports 5th axis for rotary pipe cutting including square tube
PC included in price	✗	✗	✓	2.4 Ghz Quad proc SSD drive 16G. LINUX setup
Computers required	1 (customer furnished)	0	* 1 (included)	* Mini PC Preloaded with Linux and CommandCNC +CAD;CAM
Wide Screen Monitor Suoort (HDMI)	✓	✗	✓	

CAM software	✗	✗	SheetCAM included. Version for both Linux and Windows	Custom POSTS included. Posts for both Plasma and Router. POSTS for Vetrics CAD/CAM
CAD/DRAWING Software	✗	✗	✓ CAD and Drawing	<i>Inkscape</i> and QCAD included
Ohmic Sensor	N/A	✓	FT-02	Z home backs up Ohmic
Cost	*\$1287.00	G2+ DTHC Module \$1220.00	\$1,564.00	* Cost for Acorn does not include Windows 10 computer, Case, AC components.
Options – Plasma				
Ohmic Sensor	✗	✗	✓	FT-02 Feather Touch for plasma
RS485 to Hypertherm Port	✗	✗	✓	HyT-Connect control from console and code. Allows setting of Cut current and Air Pressure from code. Supports “Soft Pierce” sequence to save consumables.
Plate Marker Support	✗	✓	✓	Control and switched outputs furnished. Mixed cuts with plasma possible.
Rotary Pipe Cutting	✗	✗	✓	Pipefit™ Joint Design software for SheetCAM
Heavy Duty Precision Z	✗	✗	✓	With Breakaway torch holder Auto ESTOP
Oxy-Fuel Cutting	✗	✓	✓	Manual THC while cutting
Wireless Jog Pendant	✓		✗	
Wired Jog Pendant	✗	✓	✓	

Remote Wireless Console Android (tablet)	✗	✗	✓	RC400 802.11 WIFI connected for speed and error free use. Complete SETUP and full RUN including g-code search and load.
Control PC Cost	\$1,050.00	\$0.00	\$0.00	
Options – Router				
VFD Control for spindle	✓ Analog or PWM (Speed Only)	✓ Analog, S&D	✓ Analog or RS485 with feedback	Optional USS-05 Spindle Speed Module.
No-Stall Torque Sensing for spindle	✗	✗	✓	RS485 Feedback from VFD allows torque sensing and auto feedrate adjust for NO STALL routing
ToolSetter Touch off device	✓ \$600		✓ \$75	
Semi-Auto Toolchange	✗	✗	✓	POSTS for SheetCAM and VcarvePro/Aspire for tool change included
Relay Expansion Module	✓	✓ 8 relays	* ✓	* Plugs to Table I/O card on back of main case. ON /OFF via screen buttons or from "M" codes
Disclaimer. Numbers and features taken from current web order pages and vendor provided feature charts. Any mistakes are unintentional and should be brought to our attention.				