



CL 350

High Performance Motor Controllers



Overview



From rugged terrain to commercial platforms, the CL-Series controllers deliver powerful torque, rock-solid stability, and smart integration. Built on robust VESC-based firmware, they support sensed, sensorless, resolver, and magnetic encoders—offering precise control for high-load electric vehicles across a broad voltage range.

With features like OTA tuning, adaptive protection, and integrated gyroscope & accelerometer, CL-Series units are trusted across EVs ranging from pit bikes and ATVs to mini tractors, go-karts, and 3-wheelers.

Key Features



4-quadrant operation



Multiple speed modes



Variable regenerative braking



Cruise modes (ADC/PPM)



Traction control



Hill assist



Adjustable protection logic



Multiple control modes

Supported Applications



Dirt Bike



Full-Size ATV



Golf Cart



3-Wheeler



Mini Tractor



Small EV
Four-Wheeler



Pit Bike



Electric Boat
/ Pods



Electric Scooter



DIY EV Projects



Mini Winch



RC Aircraft

Technical Specifications



Electrical, Environmental & Functional

Parameter	CL350
Voltage	36 to 126V
Battery Current	200A
Phase Current	400A
ERPM	150k
Operating Temperature	-25°C to 75°C
IP Rating	IP67
Motor Support	BLDC, FOC (Sine), Sensorless
Temperature Sensor	NTC and PTC
Position Sensor	SIN-COS, ABI, HALL, AS5047, AS5048A, Sensorless
Operation Modes	Sensored & Sensorless
Switching Frequency	40 kHz

Technical Specifications



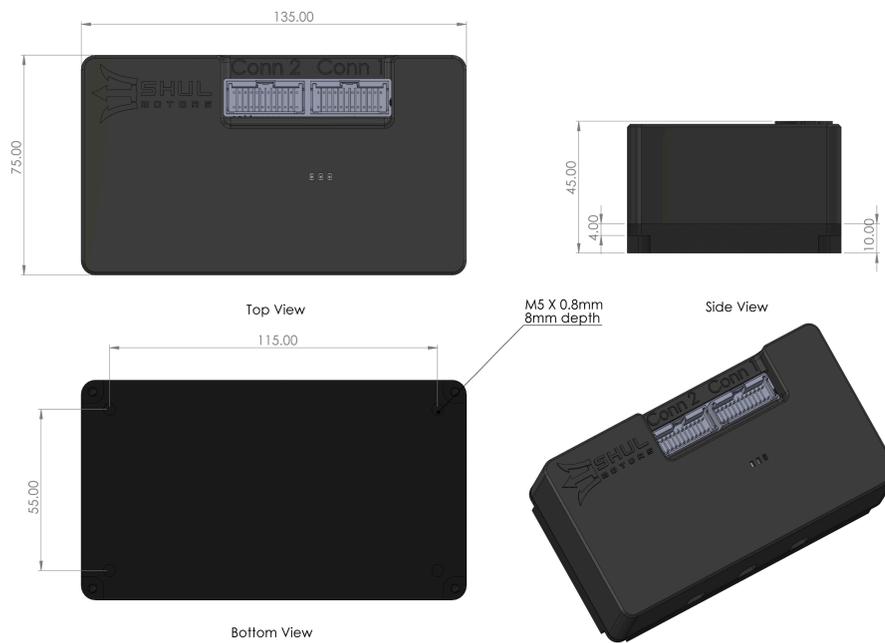
Physical, Interface & Performance

Parameter	CL350
Max Encoder Resolution	8192
Efficiency	Up to 99%
Communication	USB, CAN, UART, BT
Dimensions	135 × 75 × 45
Weight	0.92 kg
Cooling Method	120 mm Fan Mount / Passive / Liquid Cooling
Power Terminals	8 AWG Phase & 2×12 AWG Battery Wires
Analog Inputs	2 (ADC1, ADC2)
Digital Inputs	Hall, ABI, Sin-Cos, AS5047/48A
Digital Output	AUX 1
12V Power Supply	12V 1.2A DC-DC

MECHANICAL DRAWINGS



CL350 MOTOR CONTROLLER — DIMENSIONAL SPECIFICATIONS



Primary Dimensions

Length	135 mm
Width	75 mm
Height	845 mm

Mounting Specifications

Mount Spacing	115 mm
PCB Clearance	55 mm
Mounting Hole:	M5 × 0.8 mm



Thank You

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