

Hyper LynX Controller

HIGH PERFORMANCE MOTOR CONTROLLER

Precision engineering for next-generation electric
mobility systems.



8to10KW

720A

MOTOR CURRENT

360A

BATTERY CURRENT

36-84V

OPERATING VOLTAGE

Detailed Technical Specifications

ELECTRICAL

Operating Voltage	36–92V
Battery Current	360A
Motor Current	720A
Efficiency	96.71%
Motor Support	Brushed DC, BLDC, PMSM

COMMUNICATION

Primary Interface	UART/CAN
Max Encoder Resolution	8192

INTERFACE

Analog Inputs	4
Digital Inputs	9
Power Terminals	M6

ENVIRONMENTAL & MECHANICAL

Temperature Range	–10°C to 85°C
IP Rating	IP67
Dimensions	216 × 120 × 63 mm
Weight	2.1 kg
Cooling	Air / Forced Air / Liquid

FUNCTIONAL

Temp Sensors	NTC/PTC/KTY
Position Sensor	Hall Sensor, SIN-COS-ABI Encoder with PWM
Operation Modes	Sensored / Sensorless
Switching Freq	8–12.5 kHz

COMMUNICATION

AIS 004	Compatible
ISO & CE	Approved

Core Features Overview



Four Quadrant Operation



Multiple Speed Modes



Variable Regen Braking



Cruise Control



Traction Control



Hill Assist

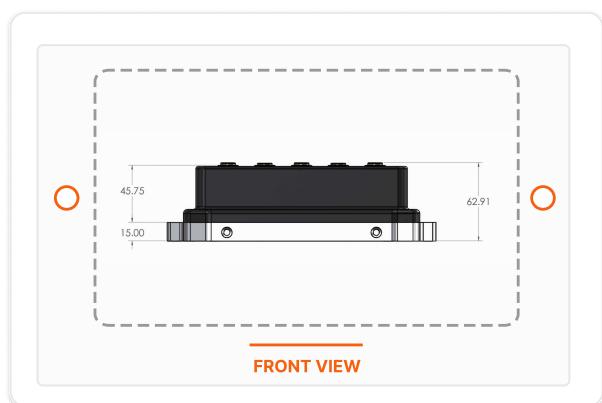


Overcurrent Protection



Smart Thermal Management

Technical Diagrams



Hyper LynX

Applications



Dirt Bike



Pit Bike



Go kart



3 Wheelers



3 Wheelers



Mini Bus



Electric Scooter



Industrial Loading Vehicle

Detailed Features & Protection

Four Quadrant Operation

Provides seamless forward/reverse control with precision dynamic braking, allowing for sophisticated motion profiles in complex applications.

Multiple Speed Modes

Configurable performance modes for efficiency, sport, or utility use. Switch between profiles dynamically based on application state.

Variable Regenerative Braking

Improves battery range and enhances braking stability by recovering energy during deceleration, fully adjustable via software.

Traction Control

Prevents wheel slip by monitoring RPM acceleration, ensuring safe operation on wet, loose, or uneven surfaces.

Hill Assist

Supports vehicle stability on steep inclines by applying hold torque when stopped, preventing rollback.

Cruise Control

Maintains constant speed with minimal driver input, ideal for long-distance transport and highway applications.



Powering the Future of Electric Mobility.