

Specifications of MTSPF4.6K (MTVESC100A) 100A 12S SUPERFOC ESC based on V4.12 speed controller:

Application	electric skateboard longboard, fighting robots, combat robots, cablecam, etc
BEC	5V BEC
Lipo	3-12Cells
Voltage	12V-50.4V
Hardware version	based on V4.12
Firmware version	Updatable, VESC_TOOL Compatible
Cont. Current	100A
Burst Current	280A
Capacitors	With high quality aluminum case, better heat dissipation
Case Size	71.5mm(L)x45.8mm(W)x18mm(H)
Power wire	Silicon wire
Accessory	USB programming cable

Features:

Compatible with brushed and brushless motors, intrunner and outrunner motors

Sensored or Sensorless operation + Hybrid mode

Adjustable Forward/Backward/Brake

Regenerative Braking Function

Configurable RPM, Current, Voltage and Power limits

Support PPM, Analog (ADC), UART, Canbus input

Support BLDC square wave mode control and FOC sine wave mode

Communication ports: USB, CAN, UART

Throttle curve and ramping for all input sources

Seamless 4-quadrant operation

Motor Revolution, Amp Hour, Watt Hour counting

Real time data analysis and read out via communication ports

Adjustable protection against:

- Max and Minimum Input(Battery) Voltage

- Max Motor Current and Input(Battery) Current limits

- Max ERPM(RPM) (separate limits for each direction)

- Max Power (Wattage)

- Max Motor and ESC Temperature

- Max Regenerative Braking Current (separate limits for the motor and the input)

Port definitions:

1. USB port for programming;
2. COMM port for various kinds of other communication methods like I2C, ADC, Uart, You can use your Arduino or Raspberry Pi to control the VESC! Also it includes an extra pin for PPM;
3. CAN Port for CAN communication with other devices and VESC arrays;
4. Sensor port for motor Hall sensors (ABI, HALL, magnetic precision encoders);

- 5. PPM to connect PPM transceivers.
- 6. Anti-spark Switch button

