

# Enhanced 1S ESC for F3P

## Specifications

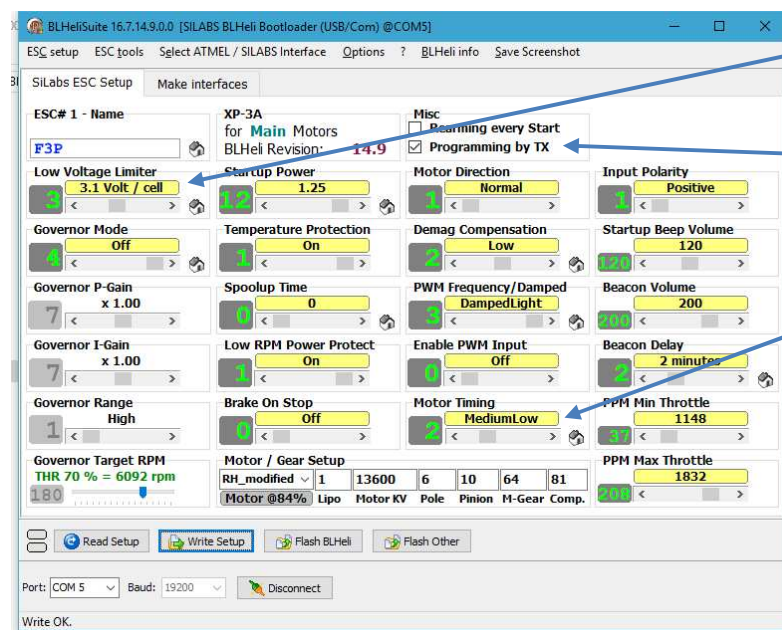
- Based on either MX-3A or HK XP-3A commercial ESC
- Silabs C8051F330 microcontroller
- Lightweight ~0.70 g
- Operating voltage 2.7 V ... 4.2 V (never exceed 4.2 V!)
- Max current 6 A
- Regenerative braking (DampedLight)
- Programmable with [BLHeliSuite](https://blhelisuite.wordpress.com/), see
  - <https://blhelisuite.wordpress.com/>
  - <https://www.rcgroups.com/forums/showthread.php?2136895-BLHeli-for-Atmel-and-Silabs-united-by-BLHeliSuite>

## Modifications

The base ESC is modified as follows:

- The original low spec FET transistors are replaced with high performance OnSemi and Toshiba devices, increasing reliability and efficiency
- All connectors removed to minimize weight
- Microcontroller flashed with BLHeli 14.9 or later
- Settings preprogrammed for F3P use, DampedLight activated to further increase efficiency and braking

## Basic Settings



LVC can be adjusted to optimize cut-off point

This can be disabled after the throttle range has been set for the TX by the normal stick method

Motor timing is optimal for Kimmosystem 1S but fits many other drives too. Can be adjusted.