

# HUBOSD8-SE

w/ STOSD8-SE, Current Sensor, Dual BEC, 6S Max.

SKU: HUBOSD8-SE

It is a multifunctional HUB with PDB, new STOSD8-SE, BEC 5V/1.5A(2A Max.) & 10V/1.5A(2A Max.), Current sensor 184A, 3~6S LiPo supports. It is specially made for the mini FPV Quad. Built-in STOSD8-SE can support Plug & Play, no complicated settings needed.

**Functions**

**General**

- Input voltage range: 9 - 27VDC(3~6s LiPo) w/ TVS protection
- PDB: 4x30A (Max.4x46A)
- Regulated 5V(POSCAP filtered) and 10V(MLCC filtered) outputs
- Current Sensor 184A
- Built-in STOSD8-SE
- Physical:
  - 2oz copper, 4-layers & 2mm PCB.
  - 1x Battery input, 4x ESC outputs. 2x BEC 5V outputs, 2x BEC 10V outputs.
  - Camera signal & Gnd pads, Video Transmitter Signal & Gnd pads
  - 1x Serial port (RX, TX, G)
  - RSSI input pad & Current sensor output pad
  - Dimensions: 46x36x4mm, Weight: 9g
  - Mounting holes 30.5mm square spacing,  $\Phi$ 3mm

**PDB (ESC outputs)**

- Continuous current: 30A per output
- Peak current (5 seconds/minute): 46A per output

**BEC 5V outputs**

- Designed for RC Receivers, Flight controllers, OSD, and Servos.
- Voltage: 5.0 +/- 0.1VDC
- Continuous current: 1.5 Amps (Max.2A 10s/minute)
- Output Ripple: 23mV (VIN=24V, VOUT=5V@1.5A load)
- Short-circuit tolerant (2 seconds/minute)

**BEC 10V outputs**

- Designed for Video TX or FPV camera.
- Voltage: 10.0 +/- 0.2VDC
- Continuous current: 1.5 Amps (Max.2A 10s/minute)
- Output Ripple: 15mV (VIN=24V, VOUT=10V@1.5A load)
- Short-circuit tolerant (2 seconds/minute)
- 10V can be used to power cameras labeled as 12V
- The 3S LiPo input voltage should be 10.8V plus

**Current Sensor**

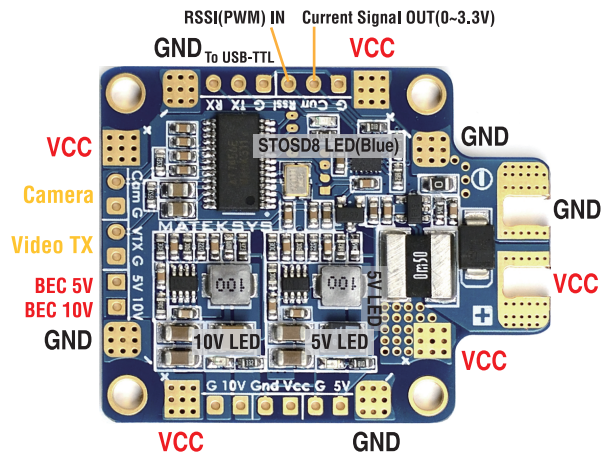
- 184A Max.
- Current signal output: 3.3V ADC for Flight controller
- Tips: If current signal pad is connected to FC, The CURRENT METER must be ON in FC GUI.
- Scale the output voltage to milliamps(1/10th mV/A): 179

**STOSD8-SE**

- **Running indicator**  
Blue LED blinks: STOSD is initializing  
Blue LED light: STOSD is working.
- **Autodetect PAL/NTSC**  
Auto sense PAL / NTSC cam at OSD startup. Default is NTSC without Cam signal
- **Dynamic on screen info**
- **Min.Volt & Max.Amp recorder**  
Current < 2A & keep 5 seconds

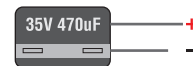
| Current < 2A & keep 5 seconds |        |       | Current > 2A |       |
|-------------------------------|--------|-------|--------------|-------|
| MatekSYS                      |        |       | MatekSYS     |       |
| 16.28V                        | 14.56V | 280   | 14.60V       | 1050  |
| 1.5A                          | 138.9A | 01:20 | 56.9A        | 02:35 |

**Layout**



Serial port(RX TX G), Use for Setting & Firmware upgrading only.  
VCC = Battery Voltage

No nets on the mounting holes



6S LiPo, it is better to put the Low ESR capacitor on the input pads

- **Automatic flight timer**  
Current > 2A, Time in. Current < 2A, Time out..
- **Auto battery cells detection**  
Low vlotage alarm (Value blinks): Default 3.6V\* cells  
Exceeding mAh alarm (Value blinks): Default 1000mAh
- **Onscreen Pilot ID**  
Default is disable. you can type some words & enable it in GUI
- Voltage precision: +/- 0.4%, Voltage resolution: 0.01V  
Current precision: +/- 1.5%, Current resolution: 0.1A
- **Firmware upgradable (new STOSD8-se firmware)**  
More info about the STOSD8-SE & How to use the STOSD8 Tool.  
Pls visit [www.stosd.com](http://www.stosd.com)

**Connections**

