



# SwiftWing PDB-02-XT60-6XT30

## 3S–6S Power Distribution Board with XT60 & 6 XT30 Connectors

Official Technical Datasheet | Document ID: SW-PDB-02-XT60-6XT30-DS-v1.2 | Release Date: February 2026

SKU: SW-PDB-02-XT60-6XT30

Product Page: <https://swiftwingtech.io/product/3s-6s-power-distribution-board-xt60-6xt30/>

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## Product Overview

The **SwiftWing PDB-02-XT60-6XT30** is a 4-layer high-current 3S–6S power distribution board featuring a factory-installed XT60 battery input connector and six factory-installed XT30 ESC output connectors.

Designed for clean and organized multirotor integration, it eliminates the need for soldered battery and ESC wiring while maintaining robust direct battery bus distribution.

Built with 2 oz copper layers and ENIG finish, this board supports organized quad and hex configurations within a compact 50 mm × 50 mm core footprint.

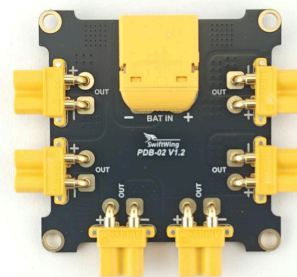


Figure 1: SwiftWing PDB-02-XT60-6XT30

## Applications

- Pre-wired quadcopter builds
- Hexacopter configurations
- Rapid UAV prototype assembly
- Educational drone platforms
- Organized high-current power routing systems

## Product Views

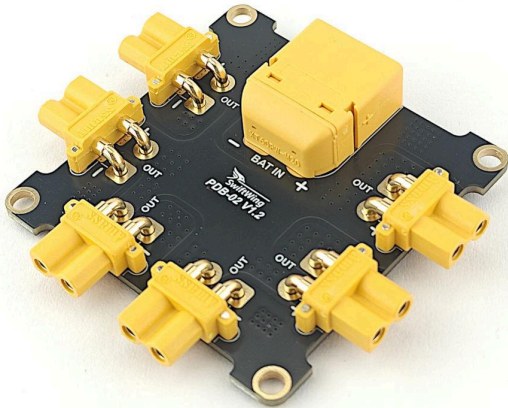


Figure 2: Top view

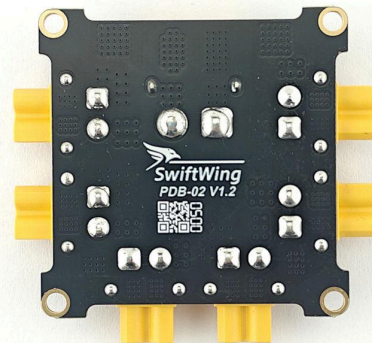


Figure 3: Bottom view

## Absolute Maximum Ratings

The following ratings define the maximum limits beyond which permanent damage to the device may occur. Operation beyond these conditions is not recommended.

Parameter	Rating
Maximum Input Voltage	26 V DC
Maximum Continuous Current (Limited by XT60)	~60 A typical*
Maximum Continuous Current (Per XT30 Output)	~30 A typical**
Operating Temperature	-10°C to +60°C
Storage Temperature	-20°C to +85°C
Maximum PCB Temperature	105°C

\*XT60 connector rating depends on wiring gauge and cooling conditions.

\*\* XT30 rating depends on wire gauge and cooling conditions.

Operation beyond these limits may cause permanent damage.

## Electrical Specifications

Electrical characteristics measured under nominal operating conditions unless otherwise specified.

Parameter	Specification
Recommended Battery Input	3S–6S LiPo (11.1–25.2 V)
Battery Connector	XT60 (factory-installed)
ESC Outputs	6 × XT30 (factory-installed)
Distribution Type	Direct battery bus

△ Total system current is limited by XT60 battery connector rating.

△ Each ESC channel current is limited by XT30 connector rating.

△ External BEC or voltage regulator is required for powering flight electronics.

## Mechanical Specifications

Parameter	Value
Board Size	50 mm × 50 mm × 1.6 mm ±0.15 mm
Mounting Holes	4 × M3 (45 mm spacing)
PCB Layers	4-layer, 2 oz copper
Finish	ENIG
Weight	21 g

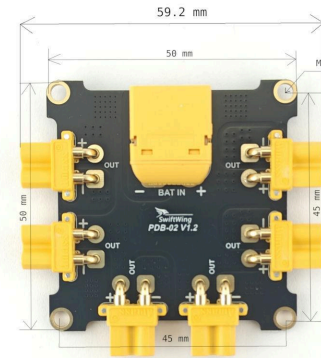


Figure 4: Top view with dimensions

## Compliance

- PCB materials comply with RoHS directive requirements.
- ENIG surface finish is lead-free.
- Designed in accordance with standard UAV electronic system practices.

## Connector & Assembly Notes

### XT60 Battery Input

- XT60 connector is factory-installed
- Battery current capacity is limited by XT60 rating (~60 A typical)
- Use appropriate wire gauge for high current applications

### XT30 ESC Outputs

- Six XT30 connectors are factory-installed

- Each channel is typically rated up to ~30 A
- Ensure balanced load distribution across outputs

### Assembly Note

- Ensure adequate airflow under high load conditions
- Verify correct battery polarity before connection

## What's in the Box

- 1 × SwiftWing PDB-02-XT60-6XT30 (XT60 and 6 XT30 connectors pre-installed)

*(No additional wiring or mounting hardware included)*

## Ordering Information

Product Name	SKU
SwiftWing PDB-02-XT60-6XT30 Power Distribution Board	SW-PDB-02-XT60-6XT30

## Manufacturer Information

**Manufacturer:** SwiftWing Robotics  
**Product Category:** Power Distribution Board (PDB)  
**Model:** SwiftWing PDB-02-XT60-6XT30  
**SKU:** SW-PDB-02-XT60-6XT30

Product Page:

<https://swiftwingtech.io/product/3s-6s-power-distribution-board-xt60-6xt30/>

Website:

<https://swiftwingtech.io>

## Disclaimer

Specifications are subject to change without notice. SwiftWing Robotics assumes no liability for improper installation, incorrect battery polarity, or operation beyond specified ratings.

Users are responsible for verifying suitability and ensuring safe system integration.

## Revision History

Version	Date	Description
v1.0	January 2026	Initial Release
v1.2	February 2026	Layout refinement and specification updates