



axldrone – PDB 100A Module Datasheet

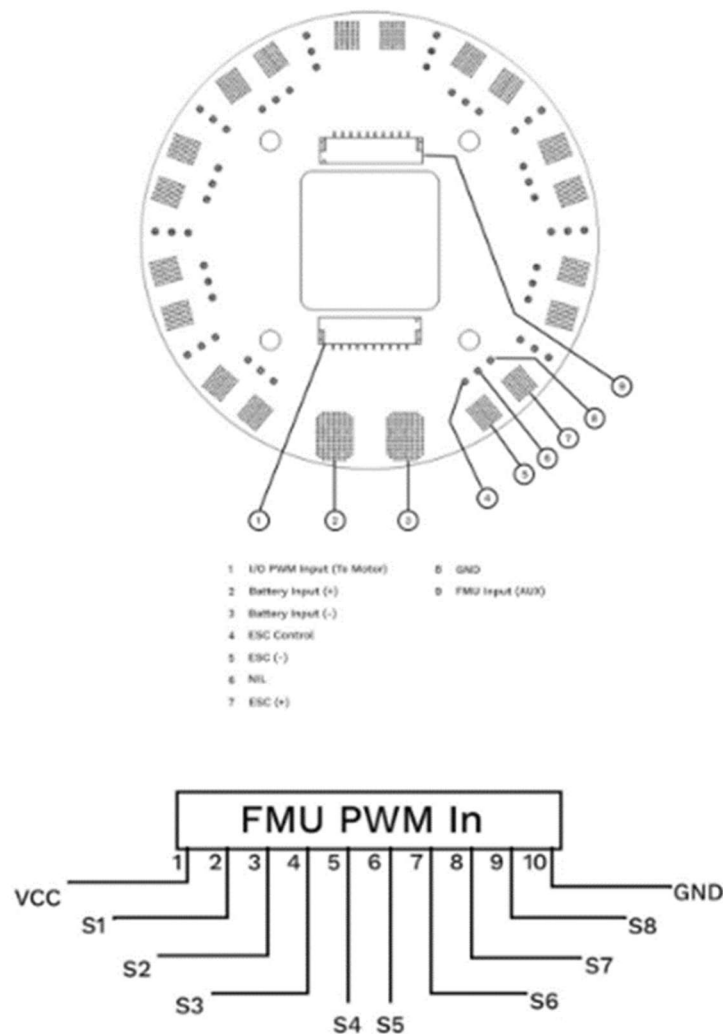
Table of Contents

Introduction.....	1
Technical Specifications	2
Peripheral & Connectivity Features	2

Introduction

The PDB 100A is a high-performance power management component engineered for advanced aerial and robotic platforms. Its sleek circular form-factor (35 mm radius) and lightweight build streamline integration into quadcopters, octocopters, and various embedded systems while minimizing added weight and drag.

Rated to handle up to 100 A of continuous current, the board supplies robust power to demanding applications and supports up to 8 ESCs, giving you individual control over each motor, ideal for optimizing flight performance.



Technical Specifications

Specification	Description
Shape	Circular design
Radius / Diameter	35 mm radius (70 mm diameter)
Height	6 mm
Thickness	1.7 mm
Weight	~17 g
Material	Glass-fiber reinforced (FR-4)
Continuous Current Rating	Up to 100 A
ESC Connections Supported	Up to 8 (quadcopter to octocopter configurations)
Input Voltage Compatibility	Standard LiPo voltage ranges (typically 2S–6S systems)
Estimated Current/ESC	~30 A per ESC (quadcopter); ~12–15 A per ESC (octocopter)
Use Cases	Quadcopter, hexacopter, octocopter applications

Peripheral & Connectivity Features

Connector / Feature	Functionality
Battery Input Pads	For main power supply connection
ESC Output Pads (×8)	Power distribution across up to 8 ESCs
FMU PWM Connector	PWM output for Flight Management Unit
I/O PWM Connector	Flexible PWM port for peripherals
Mounting Holes	M3 holes with 45 × 35 mm spacing