



SwiftWing DroneCAN 6-Port CAN Bus Splitter – JST-GH 4-Pin, Pixhawk Compatible

Official Technical Datasheet | Document ID: SW-I2CCANSPL-6P-DS-v1.2 | Release Date: April 2026
SKU: SW-I2CCANSPL-6P

Product Page: <https://swiftwingtech.io/product/dronecan-6p-can-bus-splitter/>

Product Overview

This 6-port CAN bus splitter is a compact, passive distribution board designed for expanding CAN connectivity in Pixhawk-based and DroneCAN-enabled systems. It allows multiple CAN devices such as GPS modules, ESCs, compasses, and other peripherals to be connected easily and cleanly using standard JST-GH connectors.

Built with a simple and robust design, the board ensures stable signal distribution without requiring any configuration or setup.

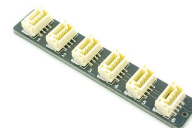


Figure 1: SwiftWing DroneCAN
6-Port CAN Bus Splitter

Key Features

- 6 × JST-GH 4-pin CAN ports
- Fully compatible with Pixhawk and DroneCAN ecosystem
- Passive design – no firmware or configuration required
- Compact, lightweight, and easy to integrate
- Clean PCB layout for reliable CAN signal distribution
- Standardized pinout for plug-and-play compatibility

Typical Applications

- Pixhawk CAN expansion
- DroneCAN sensor networks
- UAV systems (GPS, compass, airspeed sensors)
- CAN-enabled ESC integration
- Robotics and embedded CAN systems

Important Usage Notes

- This is a **passive splitter**, not an active CAN hub
- Ensure proper **CAN termination (120Ω at both ends of the bus)**
- Use **only one 5V power source** on the network to avoid backfeeding
- Keep cable lengths short for optimal performance

Why Choose This Product

Designed for simplicity and reliability, this splitter offers a clean and practical solution for expanding CAN connectivity in compact systems. Its standardized layout ensures compatibility with widely used Pixhawk-based hardware while maintaining a minimal footprint.

Product Views

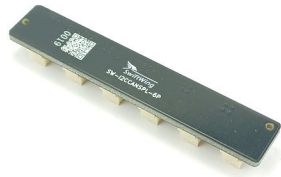


Figure 2: Back view

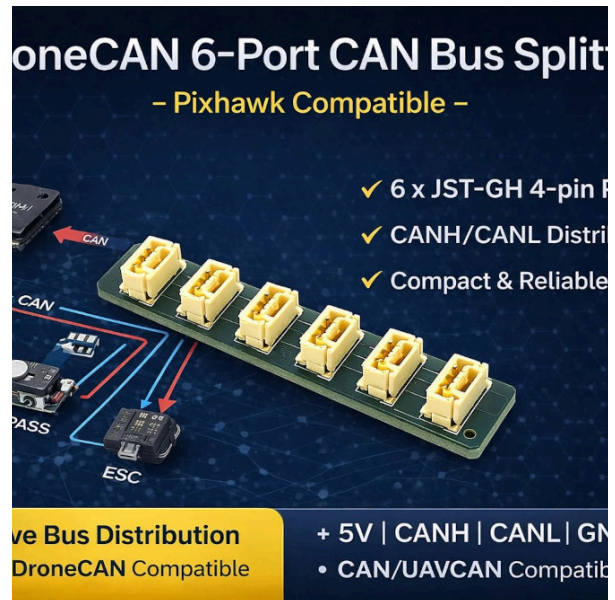


Figure 3: usage view

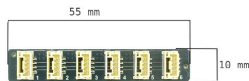


Figure 4: Top view with dimensions

Technical Specifications

- Number of Ports: 6
- Connector Type: JST-GH 1.25mm, 4-pin
- Supported Interfaces: CAN Bus / DroneCAN (UAVCAN v0 compatible)
- Operating Voltage: 5V (bus powered)
- Board Type: Passive distribution
- PCB Type: 2-layer FR4

Pinout (All Ports Identical)

Pin 1 → +5V

Pin 2 → CANH

Pin 3 → CANL

Pin 4 → GND

Working Principle

All ports on the splitter are internally connected in parallel for CANH, CANL, GND, and 5V lines. This enables multiple CAN nodes to share the same communication bus while simplifying wiring and installation.

No configuration is required—devices can be connected directly.

Ordering Information

Product Name	SKU
DroneCAN 6-Port CAN Bus Splitter – JST-GH 4-Pin, Pixhawk Compatible	SW-I2CCANSPL-6P

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/dronecan-6p-can-bus-splitter/>

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	February 2026	Initial Release
v1.2	April 2026	Layout refinement and specification updates