



High-power Wi-Fi adapter based on Realtek RTL8812AU chipset with RF power amplifiers, designed for ground-station FPV applications. Supports IEEE 802.11a/b/g/n/ac standards operating in the 5-6 GHz frequency range with 5W RF output power. Features four I-PEX Gen1 antenna ports configured for dual RX and dual 5W TX operation. Compatible with RubyFPV, OpenHD, and OpenIPC systems. Accepts primary power input of 8-31 V DC or secondary 5.0-5.5 V DC, with 5.19 V / 1 A power output and 5 V DC fan output. PCB measures 42 × 42 mm with 36 × 36 mm mounting pattern. Operates in temperatures from -20°C to +40°C at 20-95% RH non-condensing.

Product details	
Model	High-power AC180 RTL8812AU 5W + 4xAntenna 7.5db
SKU	9025
Specifications	
Chipset	Realtek RTL8812AU + RF power amplifiers
Wi-Fi	IEEE 802.11a/b/g/n/ac
Application	Ground-station
Compatible FPV systems	RubyFPV, OpenHD, OpenIPC
Frequency range	5 GHz - 6 GHz
Electrical specification	
RF output power	5 W
Power input	VI/VIN 8–31 V DC (primary), 5V19 5.0–5.5 V DC (secondary)
Power output	5.19 V / 1 A
Fan output	5 V
Interfaces	
Antenna ports	4 × I-PEX Gen1 (ANT0 RX, ANT1 TX 5W, ANT3 RX, ANT4 TX 5W)
Power input connector	MX1.25 8P (horizontal patch)

Alt. power connector	2.54mm 6P pad
Fan connector	SH1.0 / solder pads F+/F-
USB data lines	D+/D- (solder pads)
Status LED indicators	Power, Data transmission
External interfaces	
Antennas	4 × 5-6 GHz, VSWR ≤ 2.0, I-PEX Gen1 pigtail
USB host	D+/D- (USB 2.0)
Cooling fan	5 V DC
Mechanical specifications	
Mounting	36 x 36 mm
Heatsink	39 x 30 x 8 mm
Dimensions	42 x 42 mm
Weight	10 g
Operating conditions	
Humidity range	20-95% RH (non-condensing)
Operating temperature	-20 - 40 °C
Storage temperature	-30 - 50 °C
Common	
Package contents	4 × I-PEX Gen1, 1 x Cooling fan, Screws
Warranty	2 years

Wiring diagram

