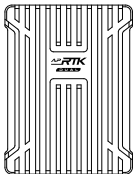


AP-RTK dual

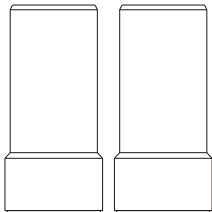
User Guide



Package Contents



AP-RTK dual



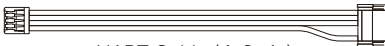
Antenna x2



Antenna Cable x2



CAN Cable (4-4 pin)



UART Cable (4-6 pin)



USB Cable (Type-C)

AP-RTK dual Specifications

• System

MCU	STM32F4, ARM Cortex-M4, 180 MHz
Compass	RM3100
Receiver	High-precision GNSS SoC
Constellations	BDS / GPS / GLONASS / Galileo / QZSS

• Antennas

Antenna 1 (Master)	BDS: B1I, B2I, B3I GPS: L1C/A, L2P/L2C, L5 GLONASS: L1, L2 Galileo: E1, E5a, E5b QZSS: L1, L2, L5
Antenna 2 (Slave)	BDS: B1I, B2I, B3I GPS: L1C/A, L2C GLONASS: L1, L2 Galileo: E1, E5b QZSS: L1, L2

AP-RTK dual Specifications

• Positioning Accuracy (RMS)

Standalone (Single Point)	H 1.5 m / V 2.5 m
DGPS	H 0.4 m + 1PPM / V 0.8 m + 1PPM
RTK	H 0.8 cm + 1PPM / V 1.5 cm + 1PPM
Heading	0.1°/1m baseline (Distance from Antenna 1 to 2)

• Satellite Acquisition

Cold Start	<30s	Init. Time	<5s
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• Data

Update Rate	Up to 20 Hz (default 5 Hz)
Format	RTCM 3.X

• Communication Protocol

Protocol	DroneCAN / NMEA
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AP-RTK dual Specifications

• I/O Ports

Antenna	2	UART	1
CAN	1	USB	1 (C-type)

• Physical & Environmental

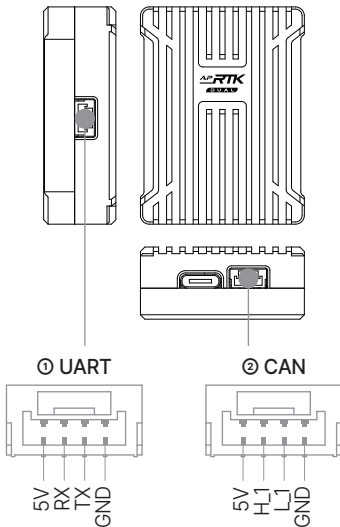
Size	49.2 × 37.1 × 16.3 mm
Weight	36 g
Operating Temp	-20 °C ~ +85 °C
Operating Voltage	4.7 - 5.2 V

Notes

- AP-RTK dual connects to the flight controller over CAN (DroneCAN) or UART; CAN is recommended.
- Before setup, fix both antennas at least 30 cm apart with a clear, open view of the sky.
- Keep away from windows and other obstacles; otherwise heading data may not be received.

AP-RTK dual Pinout & Ports

• Pinout

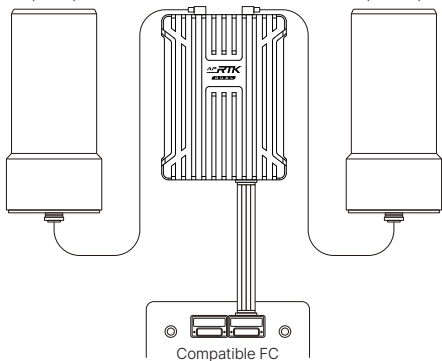


AP-RTK dual Pinout & Ports

• Port Info - CAN

Antenna 2
(Slave)

Antenna 1
(Master)

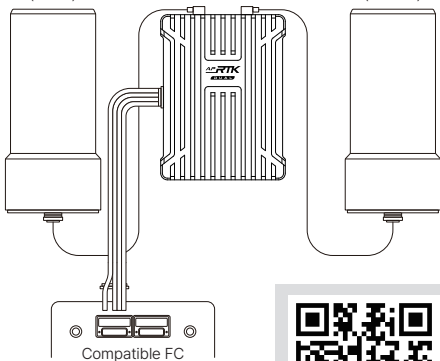


AP-RTK dual Pinout & Ports

• Port Info - UART

Antenna 2
(Slave)

Antenna 1
(Master)



<Detailed Manual>