

# RAD MINI 5.8G VTX



## Summary:

RAD MINI VTX is the latest 1W high-power VTX developed by GEPRC. It has 4 adjustable power levels and a maximum power of 1000mW, with a stable transmission signal, suitable for short and medium range flight to ensure image transmission quality.

RAD MINI adopts 6061 high-strength aluminum alloy shell to assist in heat dissipation, which has stronger impact resistance and better heat dissipation.

IRC Tramp protocol, OSD settings adjustment, Built-in microphone can provide a real-time sound transmission.

7-28V wide voltage input, with temperature control protection function to prevent overheating and burnout.

With 20x20mm PCB mounting hole, and the diameter of single hole is 3.05mm. The aluminum alloy shell can be removed and installed as a stack.

Covering the shell with a 20X20 mounting hole, and a single hole with M2 thread. It is recommended to be installed at the rear of the frame where there are 20X20 holes. Pay attention to insulation when installing, the PCB side down, and pad with four nylon spacers for installation. (included in the package)

## Specification:

- Model: GEPRC RAD MINI 5.8G 1W VTX
- Input voltage: DC7-28V (2-6S Battery)
- Output voltage: 5V@600mA(power 5V to Camera)
- Input impedance: 75Ω
- Protocol: IRC Tramp
- Antenna connector: MMCX
- Cable connector: SH1.0 5pin+SH1.0 3pin
- Output power: 25mW/200mW/500mW/1000mW/PIT MODE
- Frequency band :  
Universal frequency band(40CH),American FCC frequency band(37CH),European EU frequency band(26CH)
- Video format: PAL/NTSC
- Microphone: Built in microphone
- Mounting hole: 20x20mm
- Size: 30.83x30.83mm
- Net weight: 4.7g
- With metal shell: 8.4g

## Feature:

1. Lightweight ,high power,with a maximum power of 1000mW,suitable for short and medium range flight to ensure image transmission quality.
2. 4 Power levels: PitMode/25mW/200mW/500mW/1000mW.
3. Adopts 6061 high-strength aluminum alloy shell to assist in heat dissipation,which has stronger impact resistance and better heat dissipation.

4. With temperature control protection function to prevent high temperature burnout
5. Wide voltage input, supports 7V-28V voltage input.
6. 3 adjustable regional frequency band to meet the needs of various regions.
7. IRC Tramp protocol, OSD settings adjustment.
8. Built-in microphone can provide a real-time sound transmission.
9. One adjustment button, three indicator lights, easy to operate

## **Includes:**

- 1 x GEPRC RAD MINI 5.8G 1W VTX
- 1 x Copper tube antenna MMCX 80mm
- 1 x MMCX to SMA (Internal foramen) connector
- 1 x SH.0 5pin VTX cable(100MM)
- 1 x SH1.0 to SH1.25 camera cable(65MM)
- 1 x Set of screws

## **Connector Definition Description**

### **Indicator light and button**

Blue light: Channel indicator

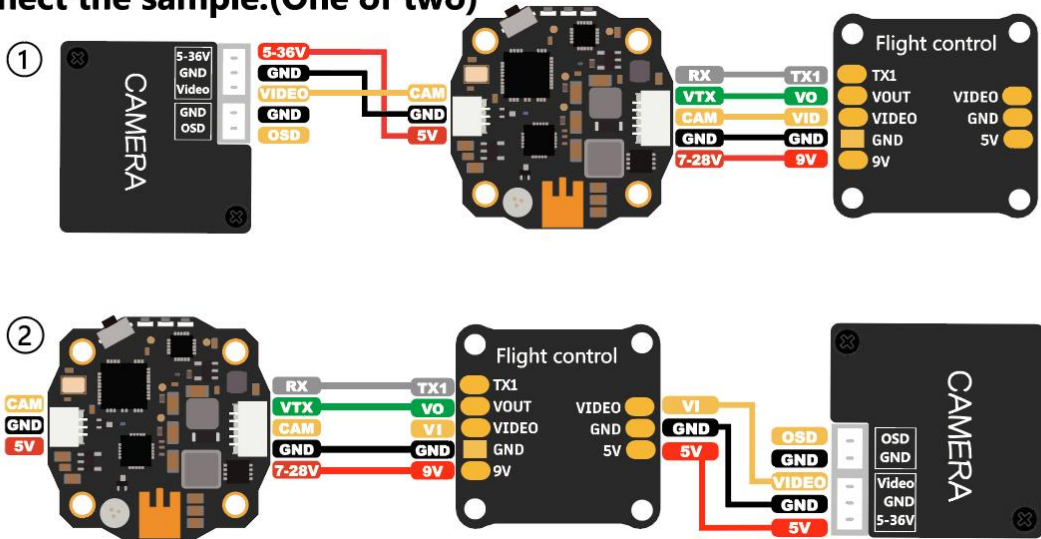
Green light: Band indicator

Red light: Power indicator

# Connection

## Diagram

Connect the sample:(One of two)



## Regional Frequency Band:

Blue, green, and red lights, flashing once at the same time represents the universal regional frequency band; flashing twice at the same time represents the US FCC frequency band; flashing three times at the same time represents the European EU frequency band.

## Adjustment method:

Long press the function button for 8 seconds and then release, three LEDs will flash at the same time,

the flashing times represent different regional bands.

Universal regional (BAND)	Channel							
	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
1, A (BOSCAM)	5865MHz	5845MH z	5825MH z	5805MHz	5785MHz	5765MHz	5745MHz	5725MH z
2, B (BOSCAM)	5733MHz	5752MH z	5771MH z	5790MHz	5809MHz	5828MHz	5847MHz	5866MH z
3, E (BOSCAM)	5705MHz	5685MH z	5665MH z	5645MHz	5885MHz	5905MHz	5925MHz	5945MH z
4, F (FATSHARK)	5740MHz	5760MH z	5780MH z	5800MHz	5820MHz	5840MHz	5860MHz	5880MH z
5, R (RACEBAND)	5658MHz	5695MH z	5732MH z	5769MHz	5806MHz	5843MHz	5880MHz	5917MH z
6, L (LOWBAND)	5362MHz	5399MH z	5436MH z	5473MHz	5510MHz	5547MHz	5584MHz	5621
US FCC Frequency Band (BAND)	Channel							
	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
1, A (BOSCAM)	5865MHz	5845MHz	5825MHz	5805MHz	5785MHz	5765MHz	5745MHz	5725MH z
2, B (BOSCAM)	5733MHz	5752MHz	5771MHz	5790MHz	5809MHz	5828MHz	5847MHz	5866MH z
3, E (BOSCAM)	5705MHz	5685MHz	5665MHz	5665MHz	5885MHz	5905MHz	5905MHz	5905MH

								z
4, F (FATSHARK)	5740MHz	5760MHz	5780MHz	5800MHz	5820MHz	5840MHz	5860MHz	5880MHz z
5, R (RACEBAND)	5658MHz	5695MHz	5732MHz	5769MHz	5806MHz	5843MHz	5880MHz	5917MHz z
<b>EU Frequency Band</b>  (BAND)	Channel							
	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
1, A (BOSCAM)	5865MHz	5845MHz	5825MHz	5805MHz	5785MHz	5765MHz	5745MHz	5745MHz
2, B (BOSCAM)	5733MHz	5752MHz	5771MHz	5790MHz	5809MHz	5828MHz	5847MHz	5866MHz
3, F (FATSHARK)	5740MHz	5760MHz	5780MHz	5800MHz	5820MHz	5840MHz	5860MHz	5860MHz
4, R (RACEBAND)	5732MHz	5732MHz	5732MHz	5769MHz	5806MHz	5843MHz	5843MHz	5843MHz

## CAUTION

1. In order to prolong the service life of the video transmission, please install the antenna before power on.
2. If the VTX overheats, the temperature control protection will be activated. When it reaches 95 degrees, it will automatically reduce the power by one gear. If it is still higher than 95 degrees, it will continue to reduce the power by one gear until it reaches 25mW. If it is lower than 90 degrees, the VTX will automatically adjust to the setting power.
3. Please ensure good ventilation and heat dissipation when using. When the environment is limited, a cooling fan can be installed for the VTX.
4. The 5V output is only used for the camera or cooling fan. Do not connect the power

input to the 5V output port, otherwise the VTX will be seriously damaged.

## **WARNING**

1. When using this product, please comply with local radio laws and regulations, and use the local permitted frequency band and channel.
2. To prolong the service life of the VTX, please install the antenna before power on.
3. Good heat dissipation can make the VTX run continuously under high power.
4. This product will produce high temperature when working, please do not touch directly with your hands to avoid scalding
5. Longer transmission distance can be obtained by using high-quality antenna.