

RUSHFPV



4.8-6.1GHz 10W Video Transmitter

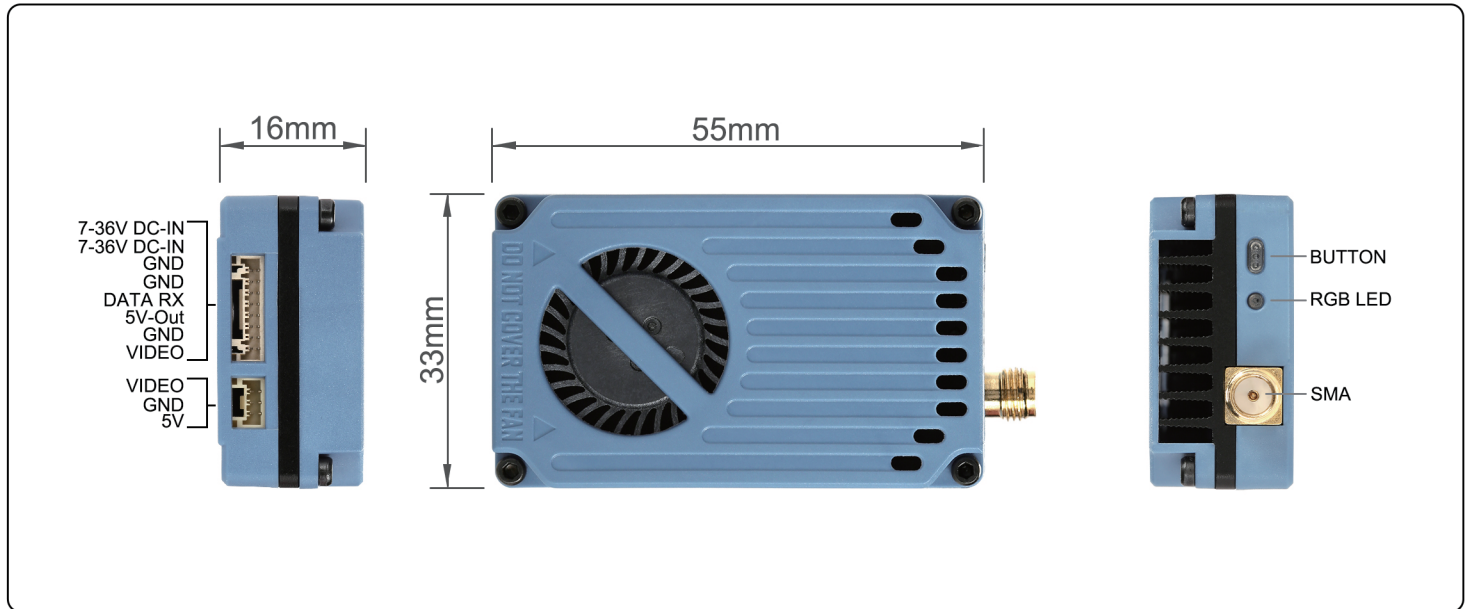
Features

- High-efficiency heat dissipation components that are compact and lightweight. Ensures stable maximum power output while weighing only 38g.
- New-generation fully integrated on-chip power amplifier that delivers a wide frequency range and efficient RF performance.
- Features a proprietary digital PLL combined with a fully closed-loop detection circuit, providing precise frequency control and flat power output.
- Equipped with a high-performance circularly polarized wideband antenna, matched to the VTX.
- Built-in USB interface for configuring VTX parameters and firmware updates*
- All VTX units undergo aging and power calibration during production to ensure exceptional consistency.

*USB is not a standard feature and is available only as a customization option for commercial customers.



Diagrams



General Characteristics

Frequency band	4875-6060MHz	Frequency precision	±200KHz(TyP.)
Channel customer	96	S/N(For +3MHz)	>55dBc
Modulation type	FM	Antenna Port	SMA 50 Ohms
Frequency control	PLL	Video input level	1V±0.2Vp-p (typ.)
Frequency stability	±100KHz (Typ.)	Operating Temperature	-20°C~+60°C
Power Supply	DC 7-30V	Control Protocol	IRC Tramp

RF Power

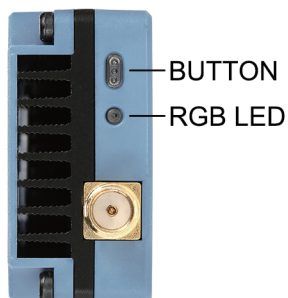
Values	0	1	2	3	4
Power Level	PIT	25mW	200mW	2w	10W
TyP.*	-20dBm	14dBm ±0.5	23dBm ±0.5	33dBm ±0.5	40dBm ±0.5

*This power rating refers to the port output power of the VTX during continuous operation at an ambient temperature of 25°C. not the peak power during cold start.

Channel List

	Band	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
1	BAND A	5474	5492	5500	5528	5546	5564	5582	5600
2	BAND b	5362	5399	5436	5473	5500	5547	5584	5621
3	BAND E	5300	5348	5366	5384	5400	5420	5438	5456
4	BAND F	5129	5159	5189	5219	5249	5279	5309	5339
5	BAND r	4990	5020	5050	5080	5110	5150	5170	5200
6	BAND P	5333	5373	5413	5453	5493	5533	5573	5613
7	BAND L	4875	4884	4900	4958	4995	5032	5069	5099
8	BAND U	5960	5980	6000	6020	6030	6040	6050	6060
9	BAND O	5865	5845	5825	5805	5785	5765	5745	5725
10	BAND H	5733	5752	5771	5790	5809	5828	5847	5866
11	BAND T	5705	5685	5665	5645	5885	5905	5925	5945
12	BAND n	5740	5760	5780	5800	5820	5840	5860	5880

Settings



Controlled using a single button, the button integrates RGB lighting, blue for band, red for channel, and green for power level.

When there is no operation, the RGB LED blinks cyclically, the number of times the RGB blinks represents the current VTX status (when the green LED is always on, the VTX enters PITMODE).

Long press the button to enter VTX setting, at this time the RGB lights are lit alternately, release the button under the corresponding color light to enter the corresponding function setting. At this time, short press the button to adjust the value.

For setup via the flight controller, connect the DATA pin and use the IRC Trump protocol.

Antenna



Polarization	RHCP	Gain	2 dBi
Bandwidth	4800-6200MHz	V.S.W.R	<1.5
Radiation pattern	Omni-directional	Cable	RG402-SMA Male