

RUSHFPV



6.1-7.2GHz 8W Video Transmitter

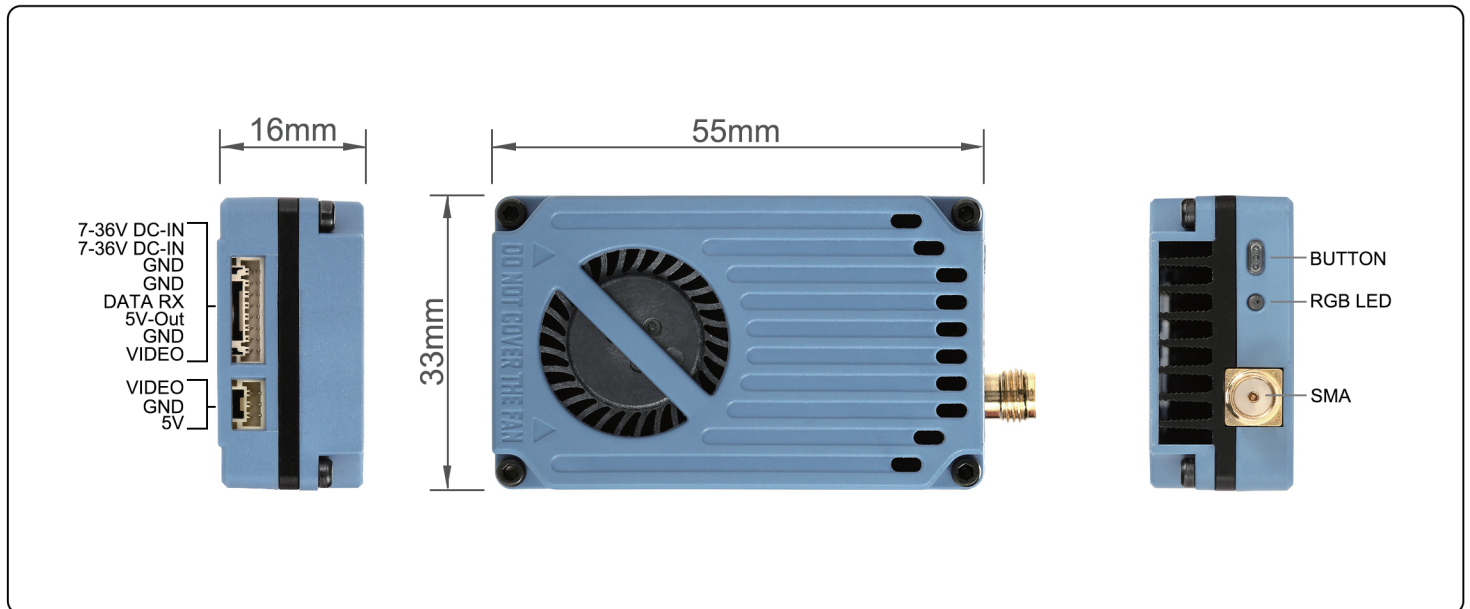
Features

- 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	6110-7210MHz	Frequency precision	±200KHz(TyP.)
Channel customer	64	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

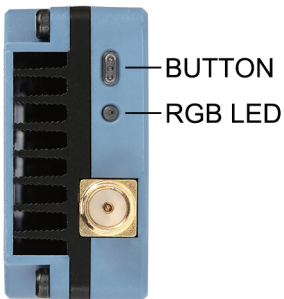
Values	0	1	2	3	4
Power Level	PIT	25mW	200mW	2w	8W
TyP.	<-20dBm	14dBm ±0.5	23dBm ±0.5	33dBm ±0.5	39dBm ±0.5

*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	6110	6130	6150	6170	6190	6210	6230	6250
2	BAND B	6270	6290	6310	6330	6350	6370	6390	6410
3	BAND E	6430	6450	6470	6490	6510	6530	6550	6570
4	BAND F	6590	6610	6630	6650	6670	6690	6710	6730
5	BAND R	6750	6770	6790	6810	6830	6850	6870	6890
6	BAND P	6910	6930	6950	6970	6990	7010	7030	7050
7	BAND H	7070	7090	7110	7130	7150	7170	7190	7210
8	BAND U	6115	6265	6425	6585	6745	6905	7065	7185

Settings



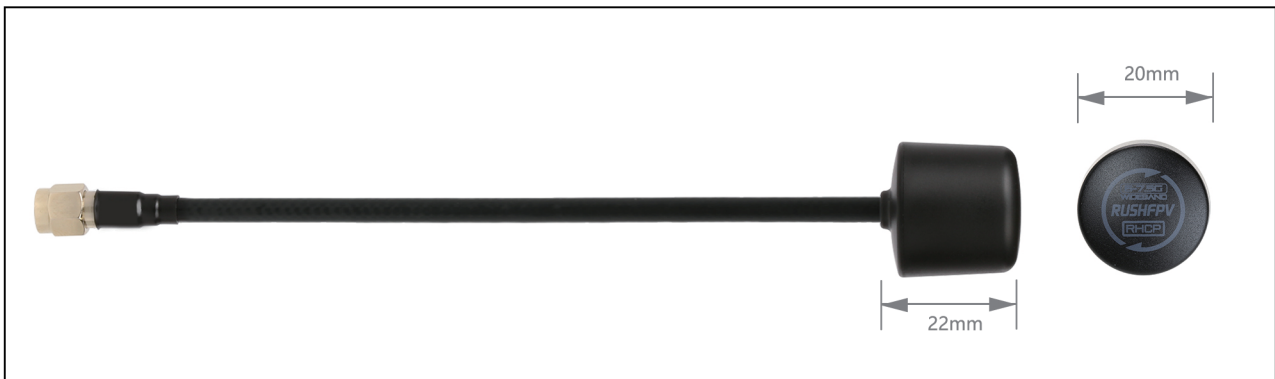
Controlled using a single button, the button integrates RGB lighting, blue for band, red for channel, and green for power level.

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
Bandwidth	6000-7500MHz
Radiation pattern	Omni-directional

Gain	2 dBi
V.S.W.R	<1.5
Cable	RG402-SMA Male